

SUPPLEMENTARY EXCAVATIONS ON A CASTLE SITE AT PAPHOS, CYPRUS, 1970–1971

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DUMBARTON Oaks has been associated with the British School of Archaeology at Athens as sponsors of two seasons of supplementary excavations by the writer, in 1970 and 1971, on the "Saranda Kolones" site at Paphos. Their main purpose was to clarify the history of the castle remains uncovered there, by stratigraphical soundings below the floors previously exposed. The present account of these two seasons is prefaced by a few words about the earlier excavations and by an introductory account of the castle, of which a considerable part has been exposed.

The remains on this site, where numerous lengths of granite columns had formerly been almost the only visible feature, had been mistaken for those of a temple;¹ that they belong instead to a compact castle was established by the writer's trial excavations in 1957 for the Cyprus Department of Antiquities.² The role of the granite columns was then revealed as a system of horizontal reinforcement for the masonry of the castle's towers (fig. 5). Although in places the walls had been robbed to the foundations, elsewhere the masonry still stood to a height of three meters above floor level. A systematic excavation of the monument seemed desirable and to this end the Department undertook two campaigns, in 1958³ and 1959.⁴ This task was resumed by the writer in two further seasons in 1966⁵ and

¹ Cf. E. Oberhummer, in Pauly-Wissowa, *Real-encyklopädie*, XVIII, 2 (1949), s.v. "Paphos," col. 944.

² Cf. A. H. S. Megaw, in *Archaeological Reports, 1957* (Suppl. to *Journal of Hellenic Studies*), 48 ff.

³ *Idem*, in *Arch. Reports, 1958* (1959), 32 ff.

⁴ V. Karageorghis, in *Bulletin de Correspondance Hellénique* (hereafter: *BCH*), 84 (1960), 292.

⁵ A. H. S. Megaw, in *Arch. Reports for 1966–67*, 25 ff.; V. Karageorghis, in *BCH*, 91 (1967), 265 ff. The writer was assisted by A. W. Lawrence, R. J. C. Jamieson (architect), and two students of the British School at Athens, J. W. Hayes and G. Waywell.

1967⁶ under the sponsorship of the British School of Archaeology at Athens, thanks to the support of the Russell Trust and of the Seven Pillars of Wisdom Trust and with assistance from the Department of Antiquities.⁷

THE CASTLE AS REVEALED BY EARLIER EXCAVATIONS

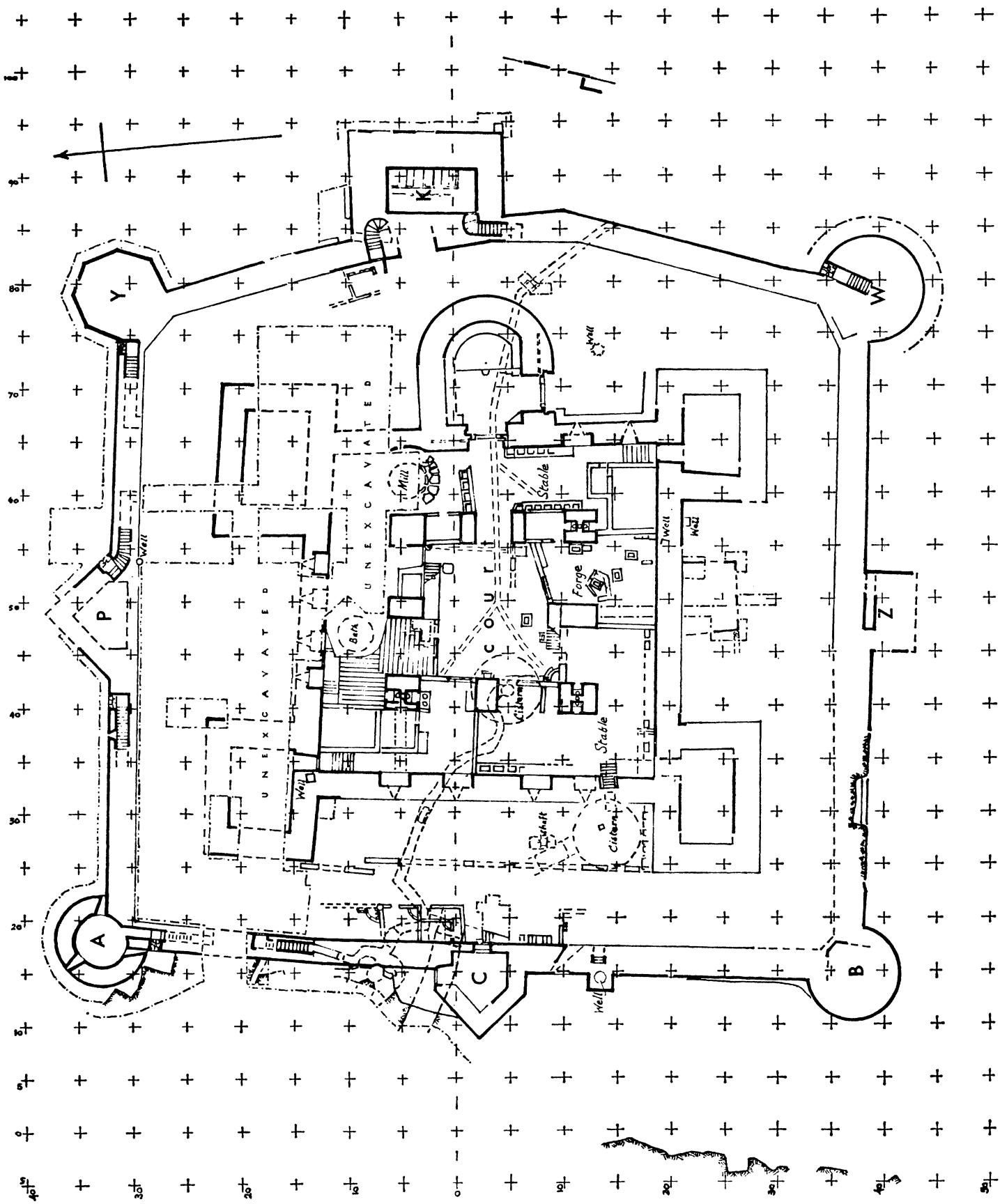
These campaigns, while they left a considerable part of the castle unexcavated and achieved a partial clearance of its ditch in only three of its eight sectors, did suffice to establish its general character. It was a five-tower residential castle, built round an open court and enclosed by an outer wall furnished with eight towers (see air view, fig. 1, and plan, fig. A).⁸ The castle proper, here referred to as the inner ward, was revealed as approximately square⁹ with a small central court 13.0 m. across on the longest side, surrounded by substantial remains of vaulted undercrofts and entered at the mid-point of the east side through a gate tower of horseshoe plan. The gate tower had two gates, the outer one in the south flank to give a "bent entrance." Both

⁶ A. H. S. Megaw, in *Arch. Reports for 1967–68*, 27 ff.; V. Karageorghis, in *BCH*, 92 (1968), 349 ff. Four students of the British School assisted: C. Bottomley, N. Brock, Judith Herrin, and Elizabeth Ramsden.

⁷ For a fuller account of the 1966 and 1967 campaigns, see the writer's "Excavations at Saranda Kolones, Paphos; Preliminary Report on the 1966–67 and 1970–71 Seasons," *Report of the Department of Antiquities, Cyprus, 1971*, 117–46.

⁸ This plan includes features exposed in 1970 and 1971. For a plan showing the state of the site at the close of the 1967 season, see A. H. S. Megaw, "The Castle of the Forty Columns at Paphos," *Proceedings of the VIII Scientific Meeting of the International Castles Institute, Athens, 25–29 April 1968* (Athens, 1970), 66.

⁹ The north wall is the shortest, a little over 30 m. internally, and the south wall the longest, a little over 31 m.



A. Plan of the Castle at the Close of the 1971 Season (scale 1:500)

gates were provided with portcullis slots and both have bolt holes, but it is clear that the inner gate was never furnished with doors. The four corner towers, of quadrangular form, were not symmetrically placed but attached to the north and south walls, an arrangement which secured a maximum interval between the horseshoe tower and those on either side of it. The projection of the corner towers from the walls between them varies considerably, from under five to over eight meters. Their floors were raised nearly two meters above the level in the undercrofts, from which they were reached by stone staircases.

Externally the towers of the inner ward were faced with large bossed blocks (fig. 5), though few of them remain *in situ* and none at all in the case of the severely plundered southwest tower (fig. 9). In the main walls plain blocks often rather roughly dressed were employed, including reused material. Other *spolia* were used in the core of the walls, which average about 2.40 m. thick,¹⁰ and were constructed with a strong lime-mortar with coarse aggregate, including many fragments of roof-tile and pottery. Remains of several embrasures in the walls are preserved. These usually have rectangular casemates well above floor level, but one near the south end of the east wall is of simple splayed form. None have survived in the towers, which are nowhere preserved above floor level. The quarrying of the outer face of the walls has destroyed all the loopholes, but several of their jamb and cap stones have been found.

The vaulting of the undercrofts was carried on massive piers of ashlar masonry (fig. 3): one at each corner, with two intermediate piers on the east side to provide a central entrance bay, and single intermediate piers on the other sides. The springings of the vaulting which spanned the spaces between them and between the piers and the main walls are still *in situ* at the top of the piers at several points. This vaulting was carried on transverse arches, one of which between the southwest pier and the south intermediate pier was reconstructed in 1966 from the original springings (fig. 3). These prove that the vaulting was of segmental profile, and it is clear that there were groined bays where the vaults between

the piers intersected with those springing from the main walls.

The piers were constructed freestanding, though, butting against them, partitions were found, which closed the intervening bays to form a continuous façade along each side of the court. These partitions were of inferior, coursed-rubble construction built with mud-mortar protected by plaster; only their large openings, which gave access to the undercrofts, were furnished with well-dressed thresholds and jambs. Other partitions subdivided the undercrofts to isolate the various facilities there provided. Next the entrance, a stable occupied the southern part of the east undercroft with mangers on either side and, at the south end, a staircase to the southeast tower and what may be harness rooms. The adjoining section of the south undercroft was a forge, extending into the southeast corner of the court, from which it was entered. A second stable in the southwest corner extended to the mid-points of the south and west walls and was entered from the west side of the court. Just inside its door, on the north side is the draw-shaft of a bottle-shaped cistern, anterior to the castle but used to store rainwater collected from the castle roof at the southwest corner of the court. A similar cistern was made accessible from the same stable by a staircase formed in the west wall. In this stable most of the mangers had been destroyed (and with them the staircase leading to the southwest tower) in the quarrying which had followed the collapse of the superstructure and had extended even below the original floor level. In the northwest corner is a staircase leading to the northwest tower and, beside the staircase, a pair of storerooms. One of these has no doorway and must have been reached from a mezzanine floor, a feature for which the height of the undercrofts was adequate: 4.5 m. at the apex of the vaults. The west part of the north undercroft was the only section paved with stone (fig. 4). It contained a stone staircase by which a small circular steam bath on the mezzanine level was reached. East of the north intermediate pier is another small room without a doorway and a corridor leading north where, in the unexcavated area, the stoking chamber for the bath furnace must lie. In the east undercroft, in the small section excavated to the north of the entrance bay, the edge of

¹⁰ The tower walls are in places thicker, up to 2.80 m.

a donkey-mill was exposed, ringed by the paving slabs on which the animal perambulated; also a row of mangers and a storeroom between the adjoining piers.

The main accommodation of the castle would have been on an upper floor, reached by two external staircases rising from the court on the south (fig. 6, bottom right) and north sides. There is evidence that this upper floor also was roofed in masonry, carried on massive piers corresponding with those of the lower storey. The latrines which are contrived back to back, in three of the lower corner piers are separated by double partitions, between which a drain shaft descends from above in each case. It is a reasonable assumption that these shafts served other latrines arranged in the same way in similar piers on the upper floor. Among the many fallen stones found are several springing blocks from the corners of piers. Two of these (inv. nos. FC.980 and 988) do not match the springings *in situ* on the lower piers; they carried vaulting of similar span but of full semicircular profile; without doubt they come from the piers of the upper storey. This would, in consequence, have had the greater height appropriate to a *piano nobile*.¹¹ The accommodation in this upper floor would doubtless have included vaulted chambers in the corner towers and also in the gate tower, where a chapel may have been located. For in this area some blocks with remains of fresco painting were found (FC.1368 and 1382). During excavation of the gate tower, voussoirs from two kinds of vaulting arch were found: one series comes from the lower vault, to judge by their position in the debris, and these have a plain rectangular profile like all the transverse arch voussoirs found elsewhere; those of the second series are moulded and appear to have fallen from the vaulting of the upper chamber, the supposed chapel.¹² All five towers would presumably have had a third storey rising above the level of the battlements round the terrace roof of the *piano nobile*.

¹¹ For a tentative restored cross section through the castle, see A. H. S. Megaw, "Saranda Kolonnes, a Medieval Castle Excavated at Paphos," *Proceedings of the First Congress of Cypriot Studies*, 1969, fig. 1 (forthcoming).

¹² For the profile, see *Arch. Reports for 1966–67*, 26, fig. 3.

The remains of the outer wall had been fully exposed, the last section including the northwest tower (A on the plan, fig. A) in 1967. This tower A is slightly oval in plan and has a basement chamber close to the level of the ditch (fig. 13), a feature found elsewhere only in the outer gate tower (see *infra*). The basement had three embrasures of simple splay form, one of which retains its approximately semicircular head, and it was reached from the south by a staircase descending in the thickness of the wall. At the foot of the staircase a sally port was provided, but this was found blocked with masonry. In the section of the north wall between tower A and tower P, at its center point, a similar staircase leads down eastward to another sally port, likewise blocked with masonry. The splayed loophole which lit this staircase is preserved. A third sally port, also blocked, in the northeast flank of tower P was reached by a similar staircase descending from the east. This tower provides a two-sided projection, but above the *chemin de ronde* of the outer wall it would have been of blunt pentagonal plan. Its lowest chamber cannot have been much below the level of the outer ward. Tower Y at the northeast corner follows the geometry of an octagon, but since two of its sides are lost in the wall it would have been heptagonal at the summit. No trace of its interior chamber has survived, but by its junction with the north wall a fourth sally port is well preserved, though blocked.

The east section of the outer wall is deflected outward to allow an adequate passage between it and the gate tower of the inner ward. In order to avoid masking the latter entirely, tower K is displaced northward from the mid-point of the east wall. Quadrangular in plan, this is the largest of the outer towers, the only one with a basement chamber apart from tower A, and the only one to have been reinforced with granite columns. That it is the outer gatehouse is proved by the survival of the jambs of an opening in its west wall at the level of the outer ward (fig. 8, top right). It is of the same width as those of the inner gate tower. It was not apparent whether the outer gate was in the long east face of tower K or in one of its flanks. A spiral staircase, entered immediately to the north of its inner gate, descends to a fifth sally port, the only one which was not effectively blocked with ma-

sonry.¹³ The basement is reached by a second staircase descending under the southwest corner of the tower; part of its segmental vault was found intact.

The circular tower W, at the southeast corner, is much destroyed; but it preserves the lower part of an internal staircase descending to a blocked sally port in its north flank. The small quadrangular tower Z likewise contains a stair shaft, but the sally port in its east flank which it was constructed to serve was never formed, nor was any staircase provided. Little survives of the southwest tower B except the rock on which it was built, trimmed to a circular outline. A small section of the floor of its lower chamber is preserved, together with the walls forming its splayed northeast corner; this is considerably below the level of the outer ward, but no trace of the staircase by which it was reached has survived. Between this and tower C a small turret was built in order to enclose a well on the line of the face of the wall, to which an access staircase was provided. Immediately north of this an oblique face of plastered masonry is the only surviving evidence for the embrasures at (or a little above) the level of the outer ward, which must have pierced the outer wall at intervals throughout the circuit. The pentagonal tower C, the eighth and last of the outer towers, is one of the best preserved. Its floor is for the most part intact, reached by two steps within a wide entrance from the outer ward (fig. 15); an equally wide postern leads onto a small terrace on its northern flank. This terrace is formed in part of solid rock and in part by the extrados of a semicircular masonry vault covering a rock-cut tunnel which passes under the northeast corner of the tower. In order to support the weight of the tower, the tunnel had been tightly packed with boulders and *spolia* up to the apex of the vault. In the section of wall between towers C and A another staircase descends, southward; it promised to lead to yet another sally port, which would make eight in all, but at the bottom it entered a rock-cut water conduit which was found blocked with masonry.

¹³ No doubt on account of its potential usefulness in an attack when, after the closing of the outer gate, a demolition party would be required to destroy whatever form of bridge provided access to the castle across the ditch.

The outer wall is about 2.50 m. thick on the average, where it is preserved to the full width, and in other respects comparable with the walls of the inner ward; some only of the towers are faced with bossed masonry (fig 14) others, like the curtain walls between them, with dressed blocks in regular courses, where *spolia* including occasional column drums are to be seen. In the core of the wall are considerable quantities of rubble packed with mud-mortar between horizons of the same strong lime-mortar used in the inner ward. The masonry has survived above the former level inside it at only two points: along towers K and C (indicated on fig. A by a thick line). Elsewhere the line of the inner face of the wall was disclosed by re-excavation of the trenches which the quarry men had opened when removing the face-blocks (indicated on fig. A by a thin line); but in a few stretches the robbing had extended into the rubble foundations, thus removing all trace of the position of the wall face (indicated on fig. A by a broken line); and close to tower B on the east side the entire foundation had been removed. This robbing of the outer wall and subsequent cultivation had led to extensive erosion of the outer ward.¹⁴

In the outer ward, only in its west section was its original level found to be preserved over an extensive area. Here, removal of the top soil to the east of tower C and southward from this point had disclosed the fallen remains of a wall constructed with mud-mortar which had divided this part of the outer ward into inner and outer sections (fig. 7). Eight courses of this wall were found in good order where it fell, toward the outer wall, evidently in one piece. This fallen wall, the extensive cracks in the masonry of the inner ward, and the manner in which the face-blocks of the outer wall at many points were found parted from its core and tipped outward into the ditch, all attest destruction of the castle by earthquake. Remains of victims of the disaster, both human and animal, were found during

¹⁴ In 1958 it was decided to reestablish the original level of the outer ward where it had been eroded, as a stacking area for the many significant architectural blocks found during the excavations. This necessitated the reconstruction of the inner face of the outer wall up to the appropriate level, a task which was completed in 1967 (fig. 2).

the excavations, in most cases disturbed by those who subsequently plundered the castle for building stone. Near one group of scattered human bones were the two rings of somewhat rustic craftsmanship which are illustrated in figure 45. Finds from contexts associated with this destruction, and the virtual termination of the series of coins from the site with early thirteenth-century issues (see *infra*), permit identification of the castle with that destroyed in the earthquake of 1222, which was particularly disastrous for Paphos.¹⁵ Although it was a surface find, it is significant that one of the latest closely datable objects from the site is a lead seal of Honorius III (fig. 43). He had been pope for six years at the time of the disaster, and he died five years later.

The existence of a rock-cut ditch encircling the outer wall was suggested by the initial contour plan of the site, made at the start of the excavations; it was confirmed by the low level at which the sally ports were found. By the close of the 1967 season the debris accumulated in the ditch area had been partially removed in two sectors to a level some 5 m. below that of the outer ward, but still much above its original floor: between towers K and W, where the level remains well above that at which the main drain from the central court discharged; and between towers Z and B. In a third sector, between towers B and C, similar clearance had been undertaken, but to a lesser depth; here a scarp of rock exposed on the outer side of the ditch indicated a width of some 15 m.

While the uncovering of the thirteenth-century floors had proceeded, producing considerable quantities of pottery, glass, and iron objects, soundings had been made at a few points in the hope of establishing when the castle was erected and of discovering earlier occupation deposits. Along the north face of the northeast tower of the inner ward, where the masonry still stands appreciably above the level outside it, a section of the foundation trench dug at the time of its construction was reopened. The fill-back thrown there by those who built the tower was covered by two well defined floors. The material forming the last

¹⁵ Oliver Scholasticus, *Hist. Damiat.*, chap. 86 (ed. H. Hoogeweg [Tübingen, 1894], 279): *presertim in Papho, in tantum ut civitas cum castro penitus subverteretur.*

floor included a few mediaeval glazed sherds, but the layer below it contained none and the trench itself produced much Hellenistic to Late Roman pottery and a coin of Phocas (A.D. 602–10). There were, indeed, two plain glazed sherds but of types unfamiliar in mediaeval contexts. Their presence did not necessarily weigh in favor of a late construction date in view of the abundance of glazed fragments in the seventh-century deposit found in the excavations at Sarachane in Istanbul,¹⁶ and glazed pottery is not unknown in contemporary contexts elsewhere in the Eastern Mediterranean.¹⁷

In a similar test against the west wall of the southeast tower a coin of Heraclius was found on top of earlier masonry which was used as footing for the tower wall. This was below the "floor" on which the quarry men operated and was sealed by an ash layer which was found everywhere in this area underneath that "floor." The same ash layer, which probably derived from the Arab destruction of the ancient city in or about A.D. 654,¹⁸ sealed the filling of a nearby well shaft just clear of the outer face of the main south wall. The filling of this well, which was never reused in connection with the castle, had been excavated in 1958. Its contents included amphora necks of seventh-century types, the neck and shoulder of a fifth-sixth century *spatheion* (fig. B),¹⁹

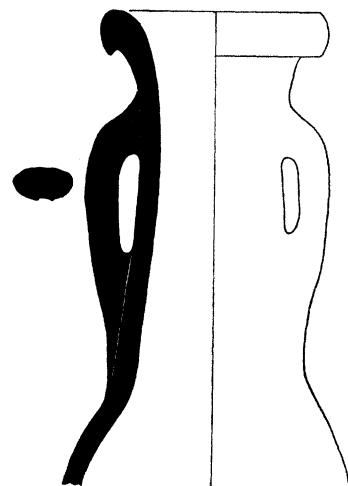
¹⁶ J. W. Hayes, in *Dumbarton Oaks Papers* (hereafter: *DOP*), 22 (1968), 203 ff.

¹⁷ For references: *ibid.*, notes 20, 21, and 39.

¹⁸ It is preferable to identify as Paphos the city which succumbed in 653/4 to Abul-Awar's expedition, "al-Paphos" in the oriental texts (following K. B. Sathas, Μεσαιωνική Βιβλιοθήκη, B' [1873], οδ', and, recently, H. W. Catling and A. I. Dikigoropoulos, "The Kornos Cave: An Early Byzantine Site in Cyprus," *Levant*, 2 [1970], 57 note 19), rather than Lapithos (preferred by Sir George F. Hill, *A History of Cyprus*, I [Cambridge, 1940], 329, and the authorities he cites).

¹⁹ This matches the upper part of a complete specimen (inv. no. P.13482) from a fifth-century context (R 17:2) in the Athenian Agora (information from Miss V. R. Grace). For a published example from the Agora, see V. R. Grace, *Ammophoras* (Agora Picture Book, 1961), fig. 67, left. These very sharply pointed vessels are there reasonably identified with the *spatheia* of the papyri; their use in the roof of the mausoleum of Galla Placidia is also cited (*Bollettino d'Arte*, 8 [1914], 9, fig. 38).

and the greater part of a large Early Byzantine marble closure panel which had measured 2.4 m. wide by 1.2 m. high when complete (fig. 26). This well had evidently fallen into disuse at the time of the Arab sack.



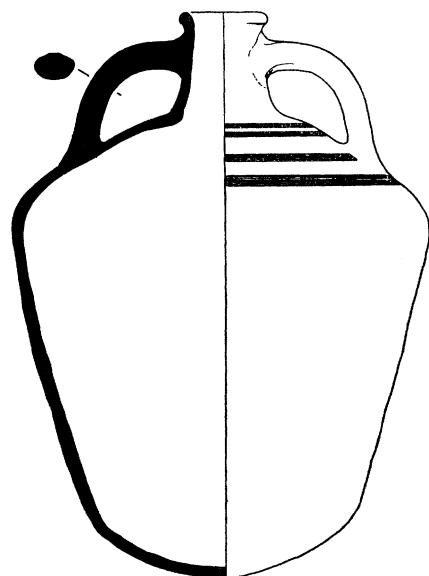
B. Neck of "Spatheion" (FC.597/1),
Fifth-Sixth Century (scale 1:4)

Other material related to remains immediately underlying the castle was found nearby, below the level of the floor of the southeast tower. Here, just below the surface, in an area of stone paving and walls, all blackened by fire, the establishment of a glass factory was attested by the quantities of glass, including wasters, which were found there. The vessels represented were for the most part cup-shaped lamps, twisted at the throat of their heavy hollow stems, and wineglasses with flat disk bases formed by the "pushed-in" technique, which leaves a tubular ring on the circumference.²⁰ There were also fragments of a few steep-sided, three-handled hanging lamps, including one on which the handles are extended toward the base as flat strips, a type represented in the seventh-century deposit at Sarachane.²¹ The associated pottery included a restorable amphora with rounded base and two short handles from the narrow neck to the shoulder (fig. 25, and profile fig. C). The majority of the amphoras found on the Yassi Ada wreck (with coins of Heraclius) were of

²⁰ For the forms, see "Excavations at Saranda Kolones" (as in note 7 *supra*), fig. 5.

²¹ *DOP*, 22, 203ff. For information about the glass I am indebted to Mr. J. W. Hayes.

this general type, but more globular,²² and "quite similar" amphoras are reported in the seventh-century destruction level at Emporio in Chios.²³ Initially, the destruction of the glass factory was erroneously connected with



C. Amphora from the Glass Factory
(FC.244/1), Early Ninth Century (scale 1:8)

the burnt remains immediately underlying the castle at several points and almost certainly attributable to the sack of Paphos by the force which landed under Abul-Awar in 653/4.²⁴ In any case, that event provided a safe *terminus post quem* for the building of the castle, and the first investigations of material associated with its construction did not suggest that a long period of time elapsed before this was undertaken.

THE EXCAVATIONS OF 1970²⁵

A prime objective was to secure more material from contexts associated with the original construction of the castle or with any oc-

²² *Archaeol. Anzeiger*, 1962, col. 552ff. and fig. 6a.

²³ *Ibid.*, col. 553.

²⁴ See *supra*, note 18.

²⁵ The writer was assisted by Mr. R. C. Anderson of the Dumbarton Oaks field staff, Mr. J. Rosser (Gennadeion Fellow of the American School of Classical Studies in Athens), Miss C. Wrinch (British School at Athens), Miss S. Bird (draughtsman), Mlle C. Froux, and Miss K. Papapetrou.

cupation prior to 1191, when the Crusaders established themselves in Cyprus. Within the inner ward the scope for stratigraphical soundings was limited. In the first place the builders of the castle had started by excavating the whole of the central square to a level some 1.5 m. below that in use in the seventh century. There was consequently no prospect of finding in this area occupation remains intermediate in date between the Arab sack and the building of the castle. Secondly, the quarry men had made extensive intrusions below the thirteenth-century floors, notably in the southwest stables. However, soundings were made at four points where the floors in use at the time of the 1222 earthquake were intact.

The first was made in the paved section of the north undercroft, where the level of the paving blocks, at 10.18 m. above sea level,²⁶ matched that of the threshold of the wide opening by which this area was entered from the court. At the southeast corner this paving had been removed when the blocks facing the substructure of the adjoining staircase were robbed down to the level of the court (figs. 4 and 6). The initial trench was limited to this disturbed area and disclosed that the intermediate north pier rested on the rock, at 9.00 m. The pier had been built with a free face of the same ashlar masonry as used in the exposed upper courses, and the layers of filling, nearly one meter deep, on which the paving rested, had been thrown against the face of the pier as its construction proceeded. After five of the paving blocks had been raised the trench was extended northward. Below the paving no recognizable mediaeval material was found, and the only coin was a bronze issue of Heraclius.

A second test was made in the small room to the east of the same intermediate pier; but this encountered rock immediately below the earth floor previously reached, on which pottery of the Crusader occupation was found.

A third trench was cut across the south undercroft from the intermediate south pier to the south wall, close to the partition bounding the forge on the west side. The floor, at 9.65, was here well defined as the bottom of a thick accumulation of ash found during the

²⁶ Other levels given are likewise in meters above mean sea level.

excavation of the forge. This floor was now seen to have been formed on a very loose fill of small rubble, which doubtless represents the levelling off of structures anterior to the castle; it contained a worn Early Byzantine coin so far unidentified. At neither end of the trench was it possible to isolate material related to the building of the castle, because both pier and wall at the points exposed had been built on pre-castle structures surviving just below floor level.

The fourth trench was cut across the west undercroft from the northwest pier to the main west wall. Initially one meter wide, it was enlarged during reexamination in 1971: northward in the corridor leading to the northwest tower, southward in the small room between the corridor and the pier. In both sections the trench cut through rubble similar to that found below the floor of the forge; but here, well below the level of the thirteenth-century floor, the sections disclosed a horizon to be connected with the building of the castle. At the east end this construction surface runs up against the masonry of a pre-castle wall on which the pier was built; but on the west side of the corridor it dips down into a foundation trench in which the west wall had been built with a fair, plastered face from a point nearly 0.80 m. below the floor in use in 1222. The fill-back in the foundation trench contained only seventh-century and earlier material. Yet the layer next above the rubble, formed of a distinctive brown earth, charcoal, plaster, and a few glazed sherds (among many plain), was barely covered by the thin stratum which served as the floor of the corridor at the time of the earthquake. Just below its surface, which was not very compact at this point, was found a group of five Crusader coins, the latest an issue of Henry I, the fourth of the Lusignan rulers of Cyprus (1218–53). This was probably a hoard purposely hidden, for if not, it would give an almost impossibly late date to the construction of the small room, since its walls rest on the brown layer in which the coins were buried. If, however, the coins are not intrusive but do date the layer next above the construction surface to *ca.* 1220, it could be argued that the date of the initial building of the castle may not have been very long before that.

The possible inference that the entire castle was a one-period structure erected in the early years of Lusignan rule seems at first to find support in the absence, in the areas tested, of any earlier occupation deposits intermediate between the construction level and that which served as the final floor. It is clear, however, that at various points in the inner ward the final level was substantially *below* that which its builders had in view. It will suffice to cite the improvised step which it was found necessary to introduce in order to reach the threshold of the entrance to the paved area (fig. 4). This circumstance fits the picture of Frankish newcomers to an existing castle drastically cleaning out earlier accumulations, to the extent that ill-defined earth floors used by earlier occupants could have been entirely removed.²⁷

While these stratigraphical investigations were in progress further sections of the main west and north walls of the inner ward were uncovered. In the northern part of the west wall the plastered sill of a rectangular casemate was exposed, the fourth in this wall. At the junction with the north wall a well shaft was found, so near the entrance to the northwest tower that it was probably designed to serve the upper floor.²⁸ Its stone wellhead was found in fragments in the fill of the shaft, thrown there when it was already half filled. At a lower level were an antique stone cornice block and two column fragments, but at the bottom nothing by which to date the use of the well was found. In the west section of the north wall its most westerly casemate was fully exposed, but the outer face of the wall had been robbed below the level at which excavation ceased. The south wall of the northwest tower was also uncovered and found to preserve the lower courses of its face masonry both inside and out. Three of its inner corners were located, but at levels below that of the floor, which appears to have been entirely destroyed.

²⁷ A case in point is the small room which the fourth trench traversed, for the brown earth layer on which its walls stand was completely eroded in the middle of the room and the final floor level was well below the threshold of its entrance door.

²⁸ Like one previously found in the thickness of the south wall.

In the outer ward, though work centered on the west sector, investigations were undertaken at two other points. A small area was opened above the main drain where it passes southeastward from the horseshoe tower to issue into the ditch. The drain had been cut in the rock, on the surface of which, nearly a meter below the level of the outer ward at the point examined, its massive cover-stones were bedded. The construction fill in the trench cut for the setting of the cover-stones contained no mediaeval material. The possibility that the drain was anterior to the castle was ruled out by examination of the section passing under the horseshoe tower, for there the cover-stones form an integral part of the substructure of the tower.

In the south sector of the outer ward, at a point midway between the two towers, a group of dressed stones had been found, lying as they had fallen from the face of some structure running east to west about five meters from the wall of the inner ward. A trench cut perpendicularly to the latter disclosed that these stones had fallen from the facing of a solid tower-like structure, which further soundings established as 6.50 m. wide and projecting 5.00 to 5.50 m. from the wall, against which it had been built. Outside the south face, from which the stones had fallen, the trench was deepened and exposed five courses of well-dressed face-blocks still *in situ* below the level of the outer ward. At the bottom of the trench (the bottom of the wall was not reached), and also in the filling against the back of the masonry, glazed pottery datable around 1200 was found. This structure had evidently been built by the Crusaders in some sort of deep pit which was subsequently filled. There is no military justification for an intermediate tower in so short a curtain, and the function was rather that of a buttress, to give support to the main wall at this point, where damage may well have resulted from some subsidence close to it.

The west sector of the outer ward was the most promising for stratigraphical soundings, because the builders of the castle had not removed pre-existing accumulations in the same drastic fashion as within the castle proper; nor after the earthquake had the quarry men been so destructive here as in the south sector, where the castle floor has survived in only one

small area. In the neighborhood of tower C, the outer wall still stands above the last level of the outer ward, which was found not only intact but sealed by the fallen masonry of the intermediate wall (fig. 7, center). About half of this fallen masonry was lifted and from the material below it, which had accumulated on the last floor, much trampled pottery was collected. Notable were fragments of the "Zeuxippus" class with orange glaze,²⁹ and folded bases of glass beakers with rather high kicks and steep sides. The latter are comparable with some from the Crusader castle at 'Atlit, on which work started in 1217.³⁰

The floor on which this material was sealed tallies with the upper threshold of the entrance to tower C, which is 0.42 m. above the original threshold and half the initial width (fig. 15). A trench cut through this floor and extending 4.40 m. east of the tower revealed four distinct layers over the initial castle level corresponding with the original threshold. The layer forming the original floor contained some late Roman lamp fragments and sherds of a seventh-century wheel-ridged Palestinian amphora with crisscross decoration in white.³¹ But neither this layer nor either of the two layers next above it contained any material recognized as mediaeval. Only in the third of the overlying layers, which except in the west part of the trench formed the final floor,³² was such material found, including both plain glazed sherds and decorated fragments of "Zeuxippus" type.

²⁹ Inv. nos. FC. 2113/3, 2125/1. On this class of glazed pottery, see A. H. S. Megaw, "Zeuxippus Ware," *Annual of the British School at Athens*, 63 (1968), 67–88, where it is regarded as a Byzantine product of the last decades of the twelfth century and the first years of the thirteenth. The class with orange glaze is evidently the latest.

³⁰ Inv. nos. FC.2113/2, 2125/2. Cf. *Quarterly of the Department of Antiquities in Palestine*, 5 (1936), 52, fig. 18, bases.

³¹ Inv. no. FC.2223/6. Of the same class are the "bag jars" of Khirbet al-Karak: P. Delougaz and R. C. Haines, *A Byzantine Church at Khirbat al-Karak* (Chicago, 1960), 34 and pls. 35, 1–5 and 55, 1–3. The type is also represented in the Sarachane seventh-century deposit: *DOP*, 22, 215.

³² Near the outer wall, a stony crust had been added to level-up a worn area in the area of the threshold.

At the east end of the same trench, immediately below the compact layer forming the first castle level, a deposit of pottery fragments was reached. This was in a loose fill with much burned material, which doubtless relates it to the Arab sack. Many of the fragments come from wheel-ridged wine jars of the common seventh-century type,³³ and there was a restorable cooking pot of a type associated with it but in this case wheel-ridged almost to the rounded base.³⁴ Here, no accumulation was found intermediate in date between the Arab sack and the building of the castle.

In the same trench, but near its west end and below the strata related to the castle, a massive wall was exposed running obliquely across the trench, leaving a space only 0.80 to 1.00 m. wide between it and the inner face of the tower wall. In order to construct the latter, this space had been excavated by the builders of the castle, who then erected their wall with a fair face, resting it at this point on a flight of stone steps rising to the south and apparently contemporary with the pre-castle wall. As the new wall rose, successive layers of rubble and earth were thrown into the interspace. In all this material, which was sealed by the first floor of the castle, nothing suggestive of a mediaeval building date was found.

Against the outer west wall and immediately south of the entrance to tower C, a narrow stairway rises from north and south to a small landing (fig. 10). This would doubtless have given access by further steps in the thickness of the wall to the upper chamber of the tower, if not also to the walk along the top of the wall. When the last castle floor was cleaned, only two risers of the northern flight were visible, the second forming the landing. A trench later cut to the north exposed no less than three further risers, each about 0.25m. high, which had been buried by accumula-

³³ Inv. no. FC.2337/4. Apart from examples from undated contexts in Cyprus, there was one in the Kornos cave dated at least approximately by the accompanying coins, the latest of which are attributable to the early years of Constans II: Catling and Dikigoropoulos, "The Kornos Cave" (see note 18 *supra*), pl. xxxix, A. The same type predominated in the seventh-century deposit at Sarachane, *DOP*, 22, 214f.

³⁴ Inv. no. FC.2337/3. Cf. Catling and Dikigoropoulos, *op. cit.*, 48, no. 14.

tions in this area since the outer wall and the steps attached to it were constructed. The lowest tread coincided with the first castle level, and the material from the layers above it up to the second tread, which was level with a well-defined intermediate floor, contained nothing recognized as mediaeval. Only above this, in the layers forming the last castle floor was mediaeval material recovered. Here, as in the alterations to the entrance to tower C, we have indications that between the first construction of the castle and the alterations that gave it its final shape some substantial interval of time elapsed.

The excavation of the west sector of the outer ward had not previously extended northward of the east-west base line (zero on the plan, fig. A). After the section on the base line had been cleaned, drawn, and photographed, the topsoil was removed for half the distance to the northwest tower in the area west of the intermediate wall, and the whole distance to the east of it. Another stretch of the foundation course of the intermediate wall was exposed in the process, as well as its north extremity, some 4.50 m. short of the tower. East of the wall, the last "floor" was reached at a level only 0.20 m. below the surface at some points, and about 0.50 m. higher than that to the west of the wall on which its masonry had fallen. On the floor of the eastern section several mangonel balls were found, suggesting that this may have been a parking area for the engines to propel them, though no trace of any came to light. West of the wall, the remains of several rooms built against the outer wall were uncovered and these were further investigated in 1971 (see *infra*).

While the outer wall was reexamined at several points, it was on the section between towers A and C that attention was focussed in 1970. At the foot of the more southerly of the two staircases in its thickness, the masonry blocking the pre-castle conduit into which it leads was removed. The continuation of the conduit and the elaborate water distribution system to which it belonged had been filled with earth when access to them from the castle was blocked; in the Crusader period to judge by the pottery included in the filling. The original water system was entirely rock-cut and consisted of a central vertical shaft communicating at the bottom through three open-

ings with an approximately concentric conduit. Its western part was amputated when the rock was scarped in order to serve as the lower part of the castle wall and to form the ditch outside it. Of the three openings thus provided from the ditch area into the part of the system remaining under the castle, two were found blocked with boulders. The third, the most southerly, was evidently retained to serve as a sally port, though there is now no sign that it was ever closed with a door. Apart from the access conduit, another opened to the east and, when the massive masonry blocking it had been broken through, it was found to communicate by a long sinuous passage with the cistern under the west side of the inner ward. It appears that, when the castle was built and the conduit under the outer wall was utilized as a means of access to a ready-made sally port, the eastward conduit was blocked off, replastered, and used as an extension of the cistern in which the rainwater from the roof terraces was stored. As such it continued to serve until the destruction of the castle in 1222, to judge by the pottery found in the filling of the draw-shaft. The sally port, on the other hand, was already abandoned at that time and access to it blocked. If this exit was closed by the Crusaders, it is not likely that it was they who originally contrived it.

In the area of the ditch, more material related to the building of the castle was recovered against the south and southwest sectors of tower A (fig. 13). Here, the general level of the rock floor of the ditch is at 7.80 m., much higher than elsewhere, where the soundings made indicate an average level under 5.00 m.; but a rectangular pit at the junction of the west wall with the tower had been cut down to 6.38 m. at some time prior to the building of the castle. On the floor of this pit the castle builders had constructed the lowest courses of their wall and tower, in fair-face masonry, and into it they had arranged for a sally port to open, reached by the staircase by which the basement in tower A is entered. But, since there would have been no exit from the pit unless the ditch were quarried down to the level of its floor, the sally port was forthwith blocked with masonry. In and below the blocking a number of sherds was collected, including neck fragments of typical

seventh-century wine jars, but nothing recognized as mediaeval. Inside the blocking, the lowest step of the staircase had been filled up to the floor level of the corridor to the north, and in this filling also only seventh-century and earlier material was identified. Outside the blocking, the pit had been refilled to the higher level of the ditch floor outside it; here too, similar pottery was found and with it a fragment of a glass lamp of the type produced in the pre-castle glass factory in the area later occupied by the southeast tower.

Nearby, in a similar pit by the southwest sector of tower A, the same results were obtained. Here the tower was built in well-dressed masonry from the floor of the pit at 5.45 m., indicating that its builders had envisaged the general level of the ditch cut down deeper than they left it (8.20 m. at this point) by at least three meters.

The section of the outer wall between towers Z and W had previously been exposed, but had become completely obscured by a massive accumulation of spoil which had been dumped in this part of the ditch during the excavation of the inner ward. This was removed and the general level in the area reduced to 6.0 m. (fig. 12). A little above this level, rock was encountered at points along the wall and on the adjoining flanks of the two towers, only a little below the underside of the lintel of the sally port in tower Z (fig. 14). A later sounding against the flank of tower W indicated that at a distance of about four meters out from the wall face the rock was scarped down to a level more than two meters lower (the scarp is visible in figs. 2 and 12). The builders of the castle clearly left the quarrying of the ditch unfinished at this point, as at others; nor did they bother, pending completion of the ditch, to form in the rock the jambs and threshold of the sally port in tower Z, nor yet to cut steps within the solid rock base of the tower to give access to it.

Round the much quarried base of the circular tower W, a two-meter trench had been started to reveal what was left of its face masonry. This was now completed and a retaining wall built along its outer edge (fig. 2, left foreground). The rock floor of the ditch was reached on the southeast at 4.56 m., but it fell away westward and was not exposed at

the level where excavation ceased (4.15 m.). Here, in the southwest sector, above the face-blocks which had been thrown down in the earthquake, some interesting finds were made. First, there were substantial fragments of mediaeval glazed pottery, of types not found in the sealed destruction contexts. The majority of these belong to bowls of classes considered to represent a relatively early phase of the Cypriot industry under the Lusignans.³⁵ The forms are for the most part rather closed, or have a small well surrounded by a low flaring rim. Apart from plain-glazed pieces with decoration incised through the slip, such as a hatched medallion or a shield, as found also at 'Atlit,³⁶ bowls of the "Early Brown and Green Sgraffito" class are well represented. With them was a fragment of a tripod stilt of the type used in the firing of such pottery; a whole specimen had been found in the debris covering the remains of the outer wall a little to the north. Evidently, a pottery was established in the course of the thirteenth century somewhere in the ruins to which the earthquake had reduced the castle.

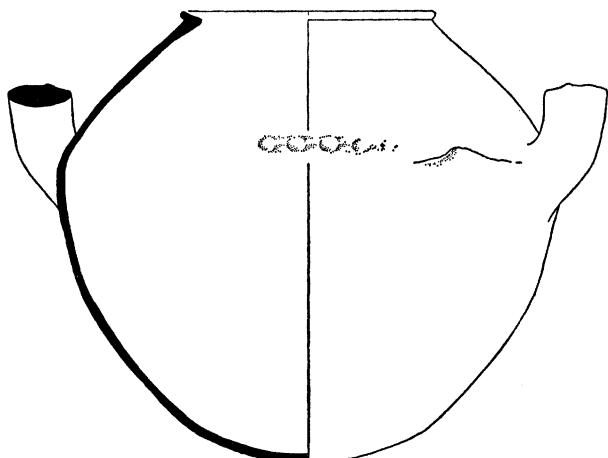
At a somewhat lower level were the fragments of several dishes of a type of slip ware which favored coarse incised decoration and has been found in many destruction contexts within the castle. A common variety has a broad border of multiple concentric lines (as fig. 33). Often the decoration is overlaid with splashes of green in the otherwise pale yellow glaze. Of the same fabric there are dishes and bowls without any decoration other than these green splashes. All are of a light-red body without external slip or glaze and rather thick; the forms vary (there are also small bowls with flattened rims, as fig. F, 5), but the vessels of this ware are all characterized by an unusually low ring base (as fig. F, 4). They have been found in large quantities for the first time at Saranda Kolones; they also occur at Kyrenia castle but local manufacture of the ware is unlikely in view of its Aegean antecedents and the fact that it has been

³⁵ For this phase, see A. I. Dikigoropoulos and A. H. S. Megaw, "Early Glazed Pottery from Polis," *Report of the Department of Antiquities, Cyprus, 1940-48*, 77-93.

³⁶ *Quarterly of the Department of Antiquities in Palestine*, 3 (1934), 138f., fig. 2, g-h, and pl. LVI, 1; *ibid.*, 5 (1936), 53 and fig. 13, 2-4.

found elsewhere.³⁷ In all probability the dishes recovered from the ditch by tower W were found broken and thrown there during the salvage operations which seem to have followed the earthquake.³⁸

With the dishes were fragments of slip-painted jugs of two types which occur in the destruction contexts: one with flat base and decoration in narrow, vertical panels,³⁹ the other as that illustrated in figure 32 (profile in fig. F, 6). There was also much plain kitchen ware, including fragments of cooking pots of two varieties represented in virtually all the deposits connected with the earthquake. Those of type A, of which a specimen is illustrated in figure 24 (a profile in fig. D), are thin, red-bodied pots which often have a disk of glaze showing dark brown in the bottom and a stroke or two on the exterior. Those of



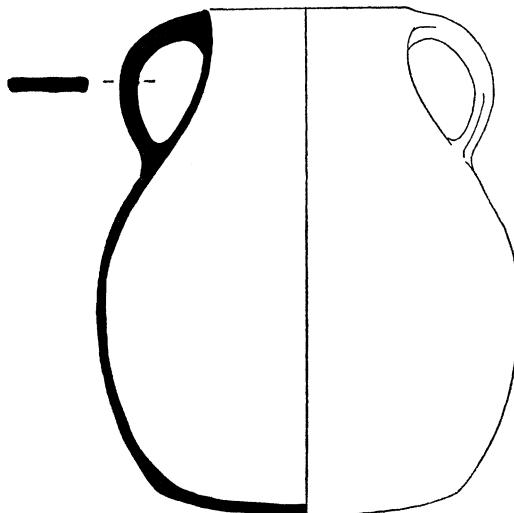
D. Cooking Pot Type A (FC.510/4A),
Early Thirteenth Century (scale 1:4)

³⁷ Observed by the writer at Corinth, also among the pottery from the British Academy excavations in the Hippodrome of Constantinople, a fragment with the same border treatment as fig. 33 (Istanbul Archaeol. Museum inv. no. 33[290], unpublished). The writer is contributing a fuller account of this ware to the forthcoming volume of studies in honor of David Talbot Rice.

³⁸ Thus would be explained the dearth of objects found abandoned in the undercrofts, in parts of which the vaulting might well have survived the earthquake.

³⁹ E.g., inv. no. FC.1024: *Arch. Reports for 1966–67*, 27, fig. 5; Megaw, "Excavations at Saranda Kolones" (see note 7 *supra*), pl. xxxiv, 5.

type B, illustrated in figure E, are rather less common; they have no trace of glaze and are of a red body which in most cases has turned grey in the firing.



E. Cooking Pot Type B (FC.62/5),
Early Thirteenth Century (scale 1:4)

Also in the tower W deposit was the greater part of a large amphora with unusually high-slung handles and an exceptionally narrow neck (fig. 27), a type previously represented by a large fragment from the floor of the inner ward. The *floruit* of this form of amphora, as indicated by the contexts of specimens from other sites,⁴⁰ leaves no doubt that the Paphos example was another earthquake victim. It confirms the origin of the dump by tower W in some store of vessels within the castle which were shattered in 1222 and subsequently thrown out.

⁴⁰ The early thirteenth-century date fits finds of similar amphoras elsewhere: in the eleventh-to thirteenth-century levels at Cherson (A. L. Jakobson, *Srednevechovij Xersones [= Materialy i issled po arx. SSSR*, 17], 105, figs. 56–58), and in an apparently thirteenth-century well group from the Athenian Agora (inv. no. P.10735, unpublished information from Miss V. R. Grace).

Another type of amphora found in the castle in destruction contexts is that illustrated in fig. 23. Likewise a Mediterranean form, this type also found its way to Russia, where one has been reported as far north as Novogrudok west of Minsk (*Sovetskaja Arxeologija*, 1962, no. 4, 238–41).

In the same dump was found an iron helmet, squashed but originally of approximately hemispherical form, 0.28 m. in diameter and 0.12 m. high (fig. 42). It had a series of bronze studs round the rim, traces of the tabby weave cloth lining, and remains of the attachments for the chin strap. There was also a quantity of smaller iron objects in corroded condition, many of them evidently from horse trappings.

THE EXCAVATIONS OF 1971⁴¹

In the inner ward, investigations were limited to the reexamination and extension of the 1970 trench across the west undercroft, with the results summarized above, and to study of the drainage system. Several of the cover-stones of the branches of the main drain, which passed under the horseshoe tower, had been exposed when the floors in use in 1222 were cleaned. More of these have now been uncovered to establish the layout of the system. Where the main drain passes under the east undercroft it is joined obliquely by a branch from the latrines in the southeast pier. This branch was flushed by waste water from the upper floor through a down pipe in the thickness of the east wall of the forge. Two more branches from the latrines in the southwest and northwest piers meet in the middle of the court at a Y-shaped junction (fig. 6). The intakes of these branches form an integral part of the substructures of the piers, as the main drain does of that of the horseshoe tower. It is consequently beyond doubt that the piers and the vaulting they carried are contemporary with the main walls and towers of the inner ward, despite their more finished ashlar masonry. Their delicate mason's marks (fig. 18) cannot therefore be divorced from those of bolder character on the bossed masonry of the towers (fig. 19).⁴²

⁴¹ The writer was again assisted by Mr. R. C. Anderson and Mr. J. Rosser; also by Miss M. Mullet (British School at Athens), Mrs. J. K. Brock (draughtsman) and Miss F. Talbot (conservationist, of the staff of the Kyrenia Ship Excavation).

⁴² The example illustrated was found in the ditch between towers B and Z of the outer wall but undoubtedly fell there (along with others) from the southwest tower of the inner ward. Curiously, the good ashlar masonry of the inner and outer gates of the horseshoe tower bears no mason's marks.

The final level in the court was substantially below that of a spillway designed to carry its storm water into the main drain. This is located under the threshold of the doorway by which the small room in the southeast corner of the court is entered. The connection with the main drain was not direct, but through a settling tank under the floor of this room and thence through an overflow pipe. This sophisticated device would have prevented any rubbish accumulated in the court from blocking the drain, and would have avoided much of the nuisance an open connection would have caused.

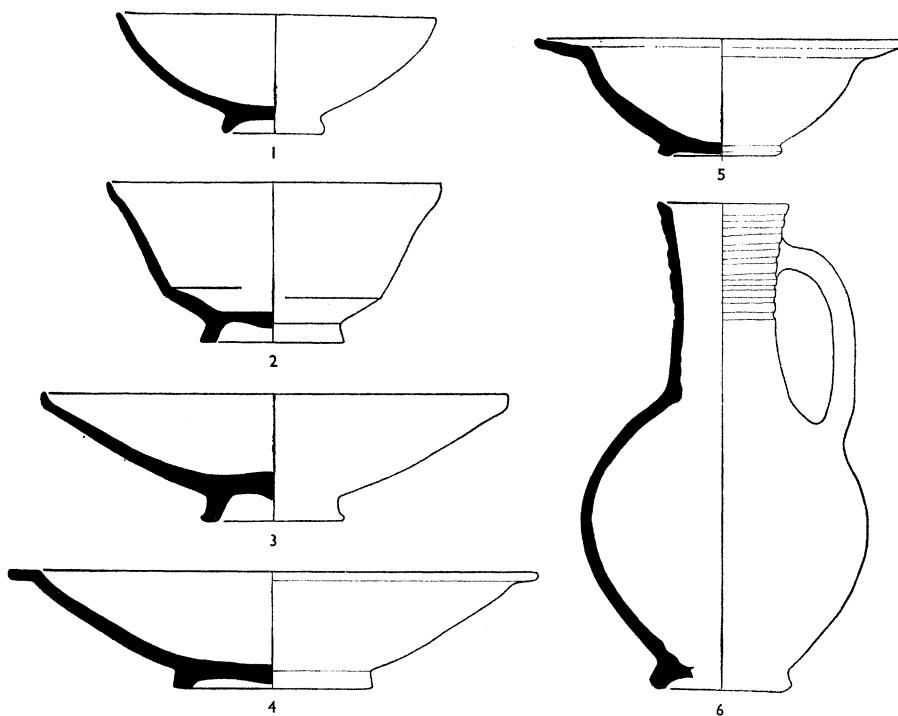
A narrower drain from the northeast corner of the court joins the main drain clumsily, and the down pipe discharging into it was crudely contrived in hollowed-out column shafts which encroached on an adjoining doorway. This drain is evidently secondary to the original system, which, if the arrangements at the southwest corner of the court are any guide, provided for the storage in cisterns of the clean rainwater collected on the roof.

In the eastern section of the outer ward, immediately to the north of the wide opening in the west wall of the outer gate tower (K), the narrow area previously excavated along the outer wall was extended westward to elucidate the remains of secondary structures which had been exposed there. It was established that here, as along the west outer wall, a row of rooms of light construction had been built (fig. 8). Their walls had in some places rested on a beaten earth floor, which proved to be the second floor of the castle at this point, elsewhere they had been cut slightly into it. In the earthquake the west wall of these rooms had fallen to the west, where a thin layer of yellowish earth formed the final level on which the tumbled masonry lay. In the most southerly room a hard plaster floor had been added and was partly preserved. In the next room there was hardly any accumulation above the pre-existing floor, but here some restorable pottery was found. There were two dishes of the type with very low ring base which is characteristic of the 1222 destruction deposits (as fig. F, 4 and 5): one with coarse incised decoration under a plain pinkish yellow glaze (fig. 31); the other, also incised, but with daubs of green added in the similar glaze (fig. 28). In addition, there was an almost

complete proto-maiolica bowl with flaring rim (fig. 30 and profile fig. F, 2). The body is of a light buff color at the surface, but darker at the core. The design is drawn in purple-

it was found to contain no recognizable mediæval material.⁴³

Along the more southerly of these rooms are the remains of a narrow corridor, in front



F. Late Twelfth- and Early Thirteenth-century Glazed Pottery (scale 1:4): 1. "Zeuxippus Ware" Bowl (FC.1315/2). 2. Protomaiolica Bowl (FC.1282/1). 3. Byzantine Incised Plate (FC.818/2). 4. Low Ring-base Dish (FC.1109/16). 5. Low Ring-base Bowl (FC.1555/1). 6. Slip-painted Jug (FC.1616/2)

black, the triangles on the rim are light green and the circles above them stippled in red.⁴³

Along the east side of this second room the floor on which it had been constructed had been destroyed by erosion following the robbing of the outer wall, and as a result an earlier one was exposed, separated from its successor by a thin but distinctive layer of charcoal. This earlier floor was also traced under the partition between the two rooms, and was found to extend to the outer wall, which is preserved at this point. Here, beneath the earlier floor, the foundation trench of the outer wall was identified and the fill-back in

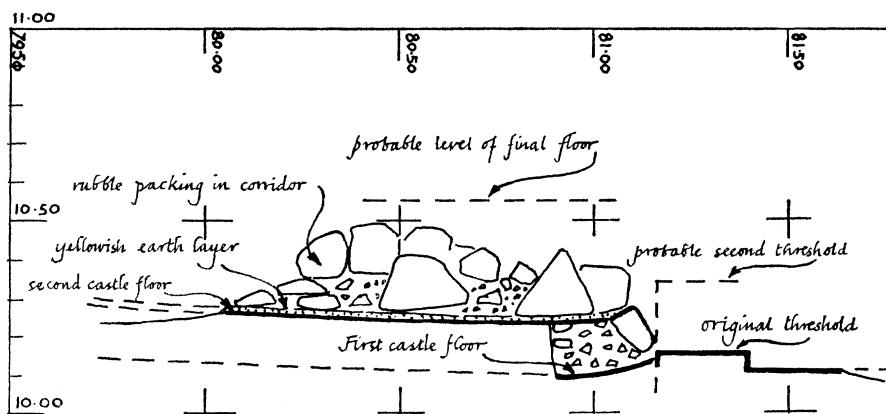
of the doorway in the outer wall which leads, by a spiral staircase, to the sally port in the north flank of tower K. This sally port was the only one of the eight in the whole circuit which was not found closed by solid masonry, and the corridor outside the upper entrance to its staircase evidently represents a rearrangement of the access to it in the last phase of the castle's history. The corridor was found filled with a layer of rubble, doubtless designed to carry a floor at a higher level, which has not survived (fig. G). At the east end, the rubble packing stops in a straight line corresponding with the inner face of the outer wall; doubtless it was packed against

⁴³ The gridiron decoration in the well of the bowl was a favorite motif in North Apulia (information from Mr. D. Whitehouse).

⁴⁴ At the time of writing the pottery from the 1971 excavations has not been finally examined.

a secondary threshold block, which the quarry men removed. Like the adjoining rooms, the corridor had been constructed on a floor which represents the second level of

In the west sector of the outer ward, a deep sounding was made through the floor of the first of the corresponding rooms built against the outer wall to the north of tower C. These



G. Section through Entrance to Sally Port Staircase in Tower K (scale 1:20)

the outer ward, at this point 10.25 m. above sea level.⁴⁵ The third and last level in the corridor must have been not less than 0.25 m. higher. About 0.15 m. below the second floor an earlier floor was found, evidently the first castle floor, because its plaster-like surface was wiped against the original threshold. There were, consequently, three distinct structural and stratigraphical phases in this doorway leading to the spiral staircase. There can be little doubt that the last phase belongs to the early thirteenth century, like the rooms themselves and their contents. No material dating the use of the second floor had been left when this was cleared for the construction of the rooms: nor did the breaking-up of a small section of the earth layer on which the second floor was formed produce anything that could fix the date when it was laid. The thin layer of charcoal below it, on the first floor, was equally unproductive. Nevertheless, the three phases of use which followed the building of the outer wall can hardly all three be assigned to the short Crusader occupation of thirty years.

⁴⁵ The thin layer of yellowish earth, which had accumulated on this level before the walls of the poorly built rooms were thrown down upon it, reappeared here as a thin stratum under the rubble packing in the corridor.

also belong to the last phase and had been built on the floor which tallied with the raised threshold of the entrance to tower C (see *supra*). The trench cut across both the inner room, which had a hearth in the southeast corner, and the corridor leading to it. In the corridor a new floor had been formed on a layer of rubble, and within the room the final floor was also raised to the same level, which was that of the curb of the hearth. Below the mediaeval floor on which the walls of the room had been built another floor was found extending to the outer wall, separated from its successor by a layer of charcoal, and below this earlier floor the foundation trench cut by the builders of the castle into remains of the seventh-century city for the construction of the outer wall. Here again no mediaeval material was found in or below the initial castle floor and, generally, the stratification here matched that found elsewhere in the outer ward.

This sounding was continued down into pre-castle layers, primarily to elucidate the history of the tunnel-like passage which passes obliquely under the north flank of tower C. The unplastered rock-cut north side of the passage was exposed, but here the masonry vault, which covers the passage below the castle wall and outside it, does not continue.

The rock floor of the passage was reached, rising as it proceeds eastward with two steps cut in the rock, later overlaid by well-dressed steps of stone. Clearly the passage existed when the water system immediately to the north was established, for the long conduit leading to the cistern under the inner ward makes a sharp turn to avoid it. It is thus one of the earliest features discovered on the site. When the castle was built it had long been disused, filled with earth, and covered by a hard floor tallying with the surface of the rock in which it had been cut; the filling and floor extended into the vaulted section under the outer wall. Later, resting on this floor and occupying the east end of our trench, a massive wall was constructed with gypsum mortar, the same wall which appeared in the trench to the east of tower C in 1970, then clearly seen to be anterior to the castle. When the castle was laid out, with the northeast corner of tower C directly over the vaulted section of the passage, it was evidently calculated that the vaulting and the earth filling below it were not strong enough to sustain the great weight of the tower; so the earth filling in almost the entire vaulted section was substituted by tightly packed boulders with a few architectural blocks of the Roman period, procured doubtless during preliminary demolitions and quarrying in the area of the ditch. The outer end of the vaulted section was then walled up with heavy masonry. Most of this masonry and the blocking of boulders behind it, which is clearly contemporary with the construction of the castle, has now been removed; from the earth in its interstices a certain amount of pottery has been recovered, none of it mediaeval.

While this work was in progress the topsoil was removed from the remainder of this part of the outer ward as far as the northwest tower (fig. 7). All that has survived of two more rooms built against the outer wall was thus uncovered. In the first a complete spit was found, in the northeast corner (fig. 41, top); and there are hearths in both. That in the northernmost room is well preserved; it retained a cooking pot in fragments between two of its hearthstones and a perforated charcoal shovel lying against an adjoining stone-built trough (fig. 41, bottom). The east wall of the same room had been removed and the

outer wall had here been robbed to a point below the level of the floor, so it was a welcome surprise when some of the contents of this room were found almost intact, where they had been abandoned at the time of the 1222 earthquake. There was a restorable green-glazed Syrian albarelo, ten-sided and standing 0.126 m. high (fig. 29), and three bronze vessels: two bowls, one of them bearing traces of an inscription, which it is hoped treatment will make legible (fig. 44), and a jug with rudimentary ornament engraved on the handle (fig. 46). Of special interest was the greater part of an iron sword, much corroded and lacking the point, now 0.69 m. long (fig. 40). The precise dating provided by the context of these objects enhances their intrinsic value.

In the ditch, the removal of dumps accumulated during excavation of the outer wall was completed around tower K and along the curtain between it and tower Y. This opened the way for an exploratory trench to expose the sally port at the foot of the spiral staircase in the former (fig. 11). The ditch had here been quarried down to 3.55 m. and its floor was at this level on the eve of the earthquake, for blocks thrown down from the tower and the curtain wall were found resting on it.

A section through the filling of the west ditch between towers A and C was cut and studied. Here the general level of the floor of the ditch was much higher: 8.00 m. The section, which coincided with the south side of the ramp carrying the modern access road across the outer wall, showed that the wall fell to the east, like the east outer wall; for at this point there is no accumulation of fallen blocks on the ditch floor. A single block was exposed in the section, 0.15 m. above the rock, and resting on hard layers containing mediaeval material, including fragments of type A cooking pots, as figure D. Consequently, here also the ditch was clear on the eve of the earthquake, down to the general level of its rock floor.

In that general level there was a characteristic irregularity, a cavity, at the point where the section was cut. It proved to be the lower part of a rock-cut water conduit, already disused and filled when the castle was built, and crossing the line of the wall face in a southeasterly direction. The castle wall had

here been constructed on the floor of the conduit at 7.20 m. and the conduit had been re-filled with the clean earth which the castle builders had excavated from it. On the south side of the section a different stratigraphy was exposed. Here the rock had been cut down to 7.10 m. for a distance of about 1.20 m. from the line on which the wall was later built. The wall face was constructed in good, dressed masonry from this lower rock level, so that the trench previously formed in the rock outside it must have been open at the time. The material with which the trench was subsequently filled was in two distinct layers: at the bottom, clean earth as found in the disused conduit and, above this and up to the level of the rock to the west (8.20 m.), a loose stratum of small stones, broken roof-tiles and pottery, but nothing recognizable as mediæval.

In the east arm of the ditch a length of masonry revetment along the outer edge of the ditch was exposed for the first time. It is of squared stone in regular courses built with a battered face, against which a massive buttress (not fully exposed) was added at one point. As this is close to the southeast angle of the outer gate tower (K), it may have been connected with an entrance bridge across the ditch at this point.

During the 1971 excavations the whole excavated area of the site was cleaned of weeds and made tidy in preparation for final photographs. The timely arrival of a mobile extending ladder of the Cyprus Fire Service made it possible to supplement the restricted coverage obtainable from ground level (fig. 2). However, in order to secure a photograph of the entire castle (fig. 1), it was necessary to operate a camera suspended from a kite, a task skillfully accomplished by Mr. Richard Anderson, almost single-handed.

THE COINS FOUND UP TO 1971⁴⁶

The provisional identification of the coins may be summarized as follows:

⁴⁶ Through the kindness of Dr. V. Karageorghis the coins were cleaned in the Cyprus Museum. For the identification of those found in recent campaigns the writer is indebted to Mrs. Ino Nicolaou.

Ptolemaic and Early Roman (with a preponderance of issues of the first century B.C.)	15
Imperial Roman to fourth century (with a preponderance of issues of the fourth century A.D.)	23
Fifth century	1
Early Byzantine from Maurice Ti- berius (582–602) to the first reign of Justinian II (685–95), including four Early Byzantine unidentified (with a preponderance of issues of Heraclius and Constans II)	44
Umayyad, early eighth century . .	1
Byzantine, twelfth century, before 1191	4
Crusader, from Richard Lionheart to Henry I of Cyprus (1218–53), in- cluding one Byzantine of Alexius III (1195–1203) and one Ayyubid of 1211–14.	25
Fourteenth to sixteenth century . .	4
Total	117

The Crusader group is inflated statistically by two small hoards, each of five coins. All the others were found singly. The great preponderance of seventh-century coins is accountable to losses at the time of the Arab siege and sack. But four of these coins were not struck until after that event, so even if none of the others circulated after 654, a Byzantine re-occupation of the site is attested.

THE GLASS FACTORY REEXAMINED

The area within the walls of the southeast tower, the greater part of which was excavated in the first campaign, was further examined in 1968, when more fragments of cup-shaped lamps and disk-based wine glasses were found and, among them, several more wasters. It was also established that the glass fragments and the associated pottery were not sealed by the ash layer to be associated with the sack of 654, but lay in or above it. On the other hand, they were below the intended level of the floor of the tower as indicated by the threshold of its entrance doorway. The tower floor itself was nowhere preserved and, to the south, the glass layer, the ash layer, and the underlying floors had all been removed by cultivation and erosion following

the robbing of the south wall of the tower. It was also disclosed that the foundation trenches of the walls of the tower had cut through all these layers where they were preserved. Consequently, the establishment of the glass factory represents a reoccupation of this part of the ruins of the seventh-century city, prior to the erection of the castle.

In November 1971, in a reexamination of the pottery from the glass factory and other key contexts, the writer had the advantage of the assistance of Mr. J. W. Hayes, who reported as follows:

Further study of the pottery associated with the glass factory and from construction contexts in the castle suggests a considerably later date for its erection than that previously favoured. The finds from the former include a number of plain and comb-grooved amphoras of Byzantine types and two fragments of Constantinopolitan glazed white ware dishes of eighth-century character. The amphoras are of types not present in deposits of the seventh century in Cyprus, but find their closest parallels among eighth-century and later material from Istanbul and Black Sea sites. A late eighth- or early ninth-century date (possibly even middle ninth-century) is tentatively suggested for the group. In particular the amphora FC. 244/1 (fig. 25 and profile fig. C), with its angular shoulder, fits best into this period.

Fragments of amphoras and cooking pots similar to those in the glass factory deposit are also present in the construction contexts, associated in some cases with scraps of coarse lead-glazed vessels, including chafing-dishes, which are reminiscent of the earliest glazed wares from Corinth, though different in fabric. This is the latest material identified in these contexts.

It follows that the *terminus post quem* for the initial construction of the castle should be advanced to the ninth century.

SUMMARY AND CONCLUSION

In assigning to the castle at Saranda Kolones its proper place in the history of fortification, there are two positions which can be taken in interpreting the remains exposed and

the objects found in the excavations. First, that it is basically a Byzantine structure, to be identified with the *castellum quod dicitur Baffes* handed over by the supporters of Isaac Comnenus to Richard Lionheart's men in 1191,⁴⁷ and that the Crusaders subsequently renovated it. Second, that it was erected in its entirety in the early years of Lusignan rule. To the latter view the Byzantine character of the plan and of certain of its defensive systems could be represented as no obstacle, because it was normal, particularly in the twelfth century, for the Crusaders to follow local traditions of fortification. It is possible also to argue that the few twelfth-century Byzantine coins prior to 1191 which have been found could have circulated in a castle built after that date; that the eleventh- and twelfth-century Byzantine pottery recovered is no more than would be expected to accumulate on the surface of a vacant site close to a harbor and settlement of some importance in the twelfth century; and, of course, that the Byzantine garrison at that time was not housed at Saranda Kolones but in some other *castellum* not yet discovered.⁴⁸

In support of a Byzantine origin is the fact that some features of the castle are unknown in surviving Crusader fortifications elsewhere: the multiplicity of sally ports, the variation of tower forms, and the inclusion of the pentagonal type—all can be matched in Byzantine work. A basic change of outlook as regards defense is apparent in some alterations and additions made apparently in the Crusader period. The blocking up of all but one of the sally ports then operable is attributable to that period by the material with which the staircases leading to them were filled. The building of the intermediate wall in the west section of the outer ward would have made the embrasures in the west wall of the castle

⁴⁷ Roger of Hoveden, *Chronica*, ed. W. Stubbs, Rolls Series, 51 (London, 1868–71), III, 111.

⁴⁸ The presence of a Byzantine garrison at Paphos in the mid-twelfth century is attested by Abbot Nicolas of Thineydar, who, returning to Europe in 1154, encountered a detachment of Varangians there: see *Antiquités russes d'après les monuments historiques des Islandais*, II (Copenhagen, 1852), 408. A few years later, in 1159, St. Neophytes was mistaken for a fugitive from justice at the φρούριον of Paphos and imprisoned there, as he relates in his Τυπικὴ Διάταξις, chap. 4.

proper virtually unusable for defense,⁴⁹ and use of those in the outer wall would have been greatly hampered by the construction of the secondary accommodation built against it. Comparable innovations within the inner ward have also been observed; the pre-castle cistern, to which an entrance was provided in the west wall near the south end, was abandoned during the Crusader period, to judge by its contents, and a new staircase to the south-west tower constructed in such a way as to block access to it. A secondary rearrangement of the drainage in the northeast corner of the court has already been noted, and, in the outer ward, the raising of the floor level above the original thresholds in both east and west sectors.

On the other hand, dilapidations on a scale necessitating such massive precautions as the construction of the buttress tower against the south wall of the inner ward are to be expected only in a building of a certain age. Nor, if the entire structure is regarded as originating after 1191, is it easy to believe that the many additions and alterations made to the initial fabric before 1222 would have been required by the same occupants so soon after completion of the castle in its initial form.

It was hoped to establish incontrovertibly that the castle is basically a pre-Crusader structure by the excavation of ample sealed deposits associated with an initial Byzantine occupation. The fact that no such deposits have been found in the limited soundings so far made (though scattered finds of Byzantine date were not lacking) is explicable in the case of the inner ward by the very drastic clearance of the building which its last occupants appear to have undertaken: the last floors were at many points reduced below the levels for which the drainage and the thresholds were originally designed, and nowhere were they above it. It was otherwise in the outer ward, for, wherever the quarry men have spared the evidence, two or more earlier occupation levels are distinguishable below the floors of additions attributable to the Lusignan period.

As to the Byzantine finds, it would be prudent to exclude from the evidence for a pre-Crusader occupation the pottery of "Zeuxip-

⁴⁹ Part of a corresponding dividing wall has also been exposed westward from the tower buttress against the south wall of the inner ward.

pus" type, for which a *floruit* prior to 1204 has been suggested.⁵⁰ There is no certainty that it reached Paphos before 1191, and the recent discovery against the outer wall of secondary rooms which were occupied at the time of the earthquake makes it possible that some specimens of this ware, such as that illustrated in figure 38, which was found in fragments scattered in the area of the ditch between towers A and C, may have formed part of the equipment of the castle in 1222.

For the same reason it is best to set on one side most of the gilt and enameled glass of the type for which a Byzantine origin before 1191 is suggested by the discovery of a few other specimens in a twelfth-century context in Russia;⁵¹ for the bottles illustrated in figures 34 and 36⁵² were found in fragments among the dislocated stones of the outer south wall between towers Z and W, and at the time of the earthquake may have been in one of a row of rooms built against this wall, though no trace of any has survived. Equally, the comparable bottle found where the main drain

⁵⁰ Apart from the bowl in fig. 38 and fig. F, 1, a number of fragments from the castle have been published by the writer in "Zeuxippus Ware" (see *supra*, note 29), 85f. and pl. 21.

⁵¹ They were found in the excavations of F. D. Gurevič on a castle site at Novogrudok (*Sovetskaja Arxeologija*, 1962, no. 1, 241–43). A small bottle of the form and size of figs. 34–36 and a beaker were first published by R. M. Džapoladjan (*Viz Vrem*, 19 [1961], 166–71), who assigned them to Byzantium and later published two more vessels from the same site, a globular flask and a bowl of closed form (*idem*, *Viz Vrem*, 27 [1967], 248–57). Meanwhile B. A. Šelkovnikov had suggested a local origin for this glass, at Novogrudok, where remains of a glass factory had been found (*Sovetskaja Arxeologija*, 1965, no. 1, 206ff.; *Journal of Glass Studies*, VIII [1966], 104ff.). In the article cited in the next note, the present writer supported the initial attribution when publishing some of the Saranda Kolones specimens of the same class, which were unknown to Šelkovnikov. The latter's suggestion had already been rejected by the Russian scholars most closely concerned with the discoveries at Novogrudok (*Sovetskaja Arxeologija*, 1966, no. 1, 312–15).

⁵² Inv. nos. FC.855/1 (fig. 34), height 0.165, and 855/2 (fig. 36), estimated height 0.168. These illustrations are reproduced from water-color restorations by Miss S. Bird. On these and other comparable glass finds from the castle, see A. H. S. Megaw, "More Gilt and Enameled Glass from Cyprus," *Journal of Glass Studies*, 10 (1968), 88–104.

discharges into the east arm of the ditch (fig. 35), which differs only in its decoration, can no longer be regarded as a decisive witness of Byzantine occupation before 1191.⁵³

It is otherwise with the fragments of a larger bottle with roundel decoration found in the stable in the east undercroft (fig. 39),⁵⁴ especially if it is correct to connect the context of a similar vessel from Corinth with the Norman raid of 1147.⁵⁵ A date in the first half of the twelfth century is independently indicated by a reference in the treatise of the monk Theophilus, now assigned to the period 1110–40, to Greek glass vessels similarly decorated.⁵⁶

But even if all this glass and the "Zeuxippus" ware are set aside, there is earlier pottery to serve as evidence of a Byzantine presence from the beginning of the twelfth century, if not earlier. The fragments of Constantinople white ware include a few with the earlier polychrome decoration, as well as more than one representative of the twelfth-century painted variety (fig. 22, top right). The slip wares of red body are commoner; they include that with "Fine Sgraffito" decoration (fig. 22, six fragments on the left), the variety with underglaze painting in brown and green and some with comparable decoration in the slip-painting technique (fig. 22, bottom right). Collectively, these cover the period from the late eleventh to the mid-twelfth century, or a little later.

Representatives of the later twelfth century are not lacking. One such is a plate decorated with a spirited goat rendered by coarse incision through the slip under a greenish yellow glaze (fig. 37 and profile fig. F, 3); it was found

⁵³ Inv. no. FC.503/1. See A. H. S. Megaw, "A Gilt and Enamelled Scent Bottle from Cyprus," *Journal of Glass Studies*, 1 (1959), 58–60.

With this bottle were found a few fragments of another of similar size (inv. no. FC.503/4: see *idem*, "More Gilt and Enamelled Glass," 90, fig. 4) as well as fragments of purple glass beakers with decoration like that on the Novogrudok beaker (inv. nos. FC. 503/2–3: *ibid.*, 90, figs. 1–3).

⁵⁴ Inv. no. FC. 481/1, estimated height 0.21. On this class with roundel decoration, see A. H. S. Megaw, "A Glass Vessel Formerly Attributed to Syria," *Alasia*, I (Paris, 1971), 135–45.

⁵⁵ C. H. Morgan, in *American Journal of Archaeology*, 42 (1938), 368 and fig. 9; G. R. Davidson, *ibid.*, 44 (1940), 297ff. and figs. 20–22; *Corinth*, XII (Princeton, 1952), no. 750.

⁵⁶ *De diversis artibus*, II, xiv (ed. C. R. Dodwell [London, 1961], 46).

in fragments scattered at all levels in the debris filling the west undercroft. This is close in technique to many examples of the "Incised Sgraffito" class of the free style found at Corinth, datable to the second half of the century.⁵⁷ But, since it cannot be dated more closely, it is better to rely on the Byzantine pottery of the early twelfth century as evidence of pre-Crusader occupation of the castle.

If, then, the basic structure of this castle is Byzantine, when was it built? A *terminus post quem* around the middle of the ninth century is provided by the pottery from the pre-castle glass factory, as well as by the comparable fragments and the few from plain-glazed chafing dishes found in construction contexts. This warrants the suggestion that work may have started on the castle during the interlude in the long demilitarization of Cyprus, when the Island was established as a Byzantine theme, by Basil I according to Constantine Porphyrogenitus.⁵⁸ The construction of a compact castle at that time to protect the harbor of Paphos, the most accessible to the Byzantine fleet of those in the Island, could well have formed part of the measures that must have been taken to forestall the inevitable Arab reaction. From the fact that the command of the theme by the Armenian general Alexius lasted only seven years, according to Porphyrogenitus, it is reasonably assumed that the reaction brought his tenure to an end before the Island could be put in a proper state of defense.⁵⁹ If work on the Paphos castle was started during this brief Byzantine intervention, in violation of the demilitarization treaty of 688, there is no difficulty in explaining why it was abandoned before the ditch was quarried down to the projected level and before the inner gateway of the castle proper had been provided with doors. If it was not occupied at this stage, the lack of contemporary coins on the site is not surprising.

There is no pottery evidence to support a building date at the time of the final reestablishment of Byzantine control in 965.

⁵⁷ *Corinth*, XI (Princeton, 1942), 150–7.

⁵⁸ *De Thematisbus*, 40 (ed. A. Pertusi [1951], 81.

⁵⁹ For a contrary view, that Cyprus remained under full Byzantine control after Alexius' seven-year command, see A. I. Dikigoropoulos, "The political status of Cyprus A.D. 649–965" (*Report of the Department of Antiquities, Cyprus* [1940–48], 94–114), 105.

Indeed, if the evidence against the construction of the castle in its entirety by the Crusaders is accepted, the choice may be narrowed to the reign of Basil I or the years around 1100. The latter period may be considered a candidate because, among the Byzantine glazed pottery found in the castle, it is the wares then in vogue that are the first to be represented in considerable quantities; and it is known that at this time, under Alexius I, measures were taken for the security of the Island after the revolt of Rhapsomates. It was on Cyprus that Alexius' subsequent operations in Syria and Cilicia were based, and it can reasonably be inferred that attention was then paid to the refortification of the Island.⁶⁰

However, the archaeological material from the foundation trenches, insofar as its study has been completed, speaks in favor of the earlier date. An example of what should be expected in such contexts when associated with a mediaeval construction has been provided by investigation of the tower buttress added against the south wall of the inner ward: the numerous glazed sherds found in the fills against its masonry are of types current in the Crusader period, when it was certainly built. Examples of Byzantine glazed wares of the late eleventh and early twelfth century, such as have been found in the castle, occur elsewhere in Paphos, even in areas, like the Villa Dionysos, which are without structural remains of that period. So, if the area where the castle now stands had indeed remained vacant since the ninth-century reoccupation attested by the glass factory material, it is hard to believe that the basic structure could have been built as late as *ca.* 1100 without a single piece of the very distinctive Byzantine wares of that time finding its way into one or other of the numerous construction contexts already examined. That they are not represented there but are found elsewhere in the castle strongly suggests, in conjunction with the other evidence, that it was started during the seven-year administration of Cyprus as a

⁶⁰ It was to the Duke of Cyprus that Alexius in 1102 entrusted the building of the strong fort of Mont Pélerin dominating Tripolis, in order to aid Raymond de Saint-Gilles in his siege of that city: Anna Comnena, *Alexiad*, XI, 7 (Bonn ed. II, 106 f.).

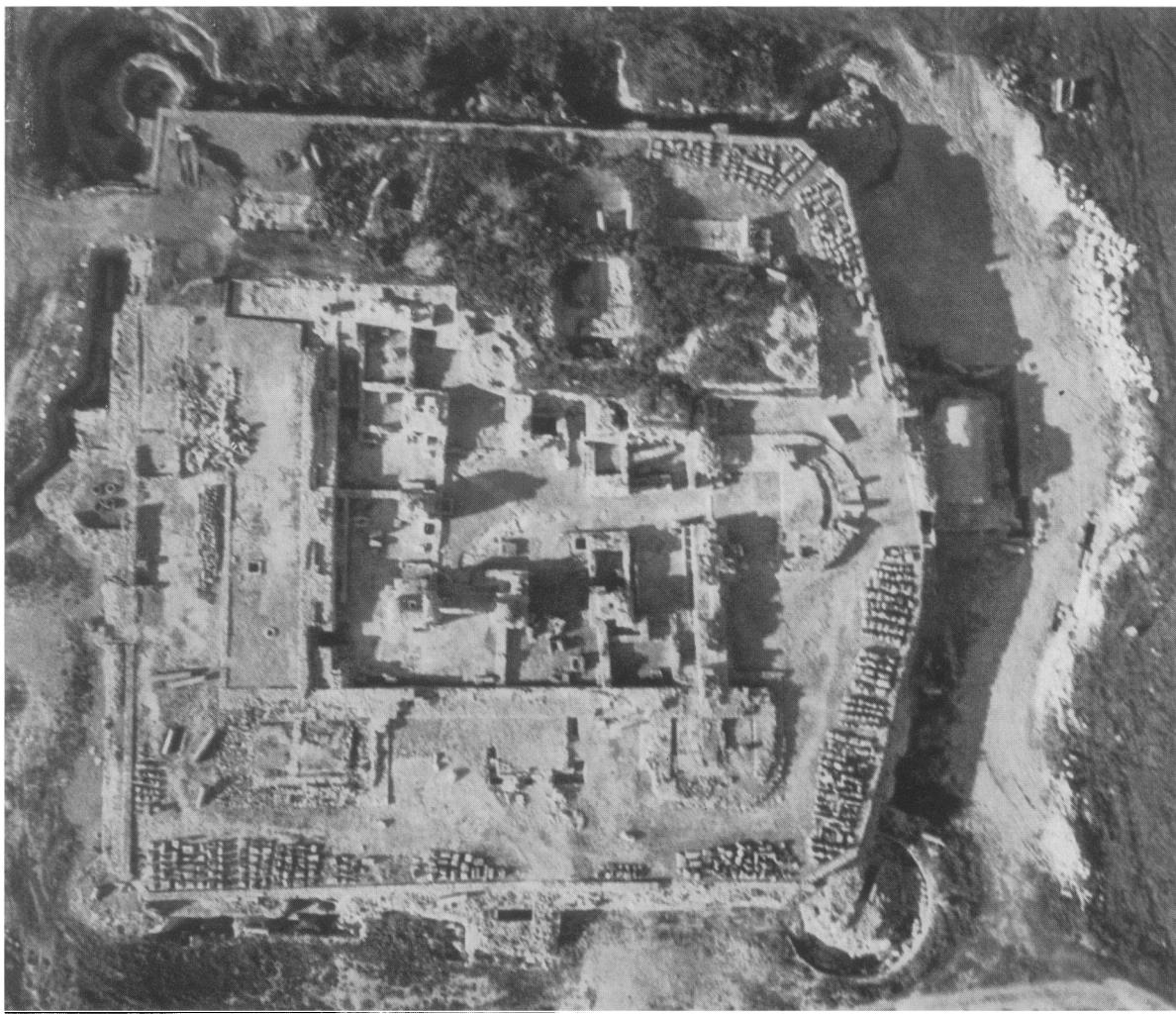
Byzantine theme under Basil I, but remained incomplete, and that even after the Byzantine recovery in 965 it was not made serviceable and garrisoned until the time of Alexius I.

This is not to belittle the contribution of the Crusaders to the final shape of the castle. Apart from the tower buttress and the barracks built against the outer wall, examination of the undercrofts has indicated that some at least of the partitions are their work. But in the main their alterations and additions would have been in and above the *piano nobile*, which they may well have found still incomplete. Of all this superstructure nothing remains *in situ*, but among the debris fallen from it several significant elements were found. Notable is the series of beaked corbels (fig. 21); these were doubtless spanned by the simple cornice blocks found with them (fig. 20) and formed the modillions of the cornice round the central court, along the walls of which they lay. Comparable are the cornices which crown the apses of the former Crusader cathedral of St. John in Beirut (now the principal mosque), though there the modillions include no example of the beaked form which alone is used at Paphos,⁶¹ and both these and the similar cornice above the north door of St. Mary the Great (now the Lutheran church) in Jerusalem⁶² are to be dated before 1150. A much larger corbel from the northwest corner of the court (fig. 16) cannot be matched exactly, but the bold chevrons below the monster's head are a characteristic Crusader motif. Likewise the capital in figure 17, by its seaweed-like foliage and elongated form, evokes early Gothic analogues, though it is to some extent inspired by the Early Byzantine "Theodosian" type of capital. It was found in the inner gateway of the horseshoe tower and like the molded voussoirs found nearby⁶³ may have fallen from the presumed chapel in the upper storey. Further study of the several hundred significant blocks, which fell from the superstructure and are now arranged in the outer ward, should greatly clarify the extent and character of the Crusader contribution.

⁶¹ C. Enlart, *Les monuments des Croisés dans le Royaume de Jérusalem* (Paris, 1925), pls. 69, 74, and 75.

⁶² *Ibid.*, pls. 103 and 104.

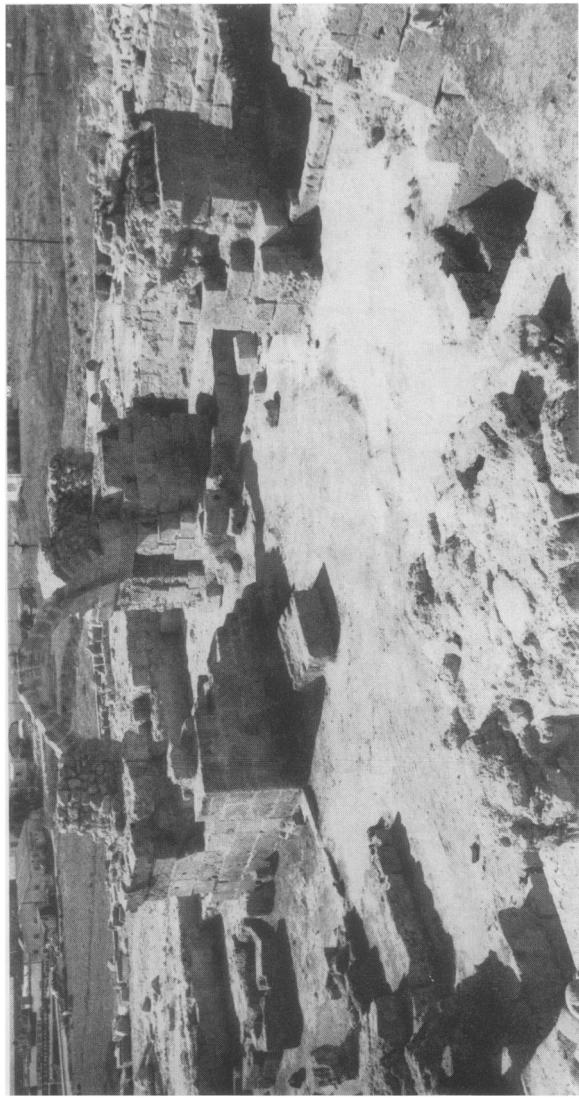
⁶³ For the profile, see *Arch. Reports for 1966-67*, 26, fig. 3.



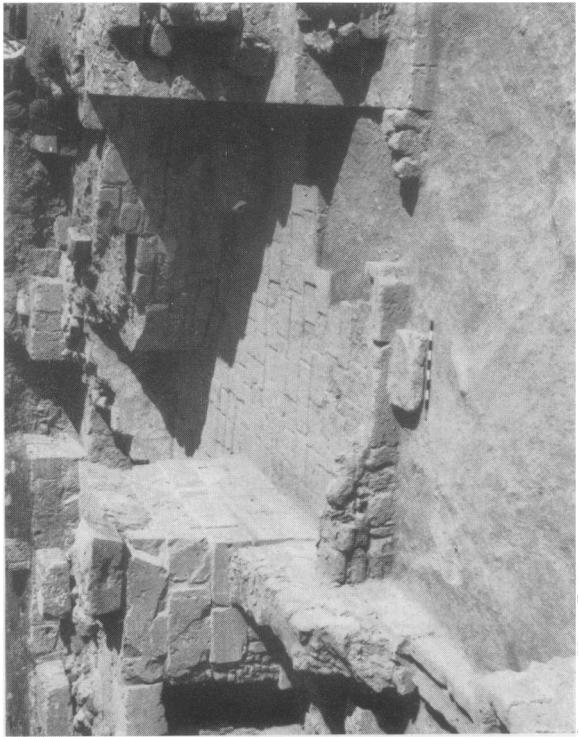
1. Air View, North at top



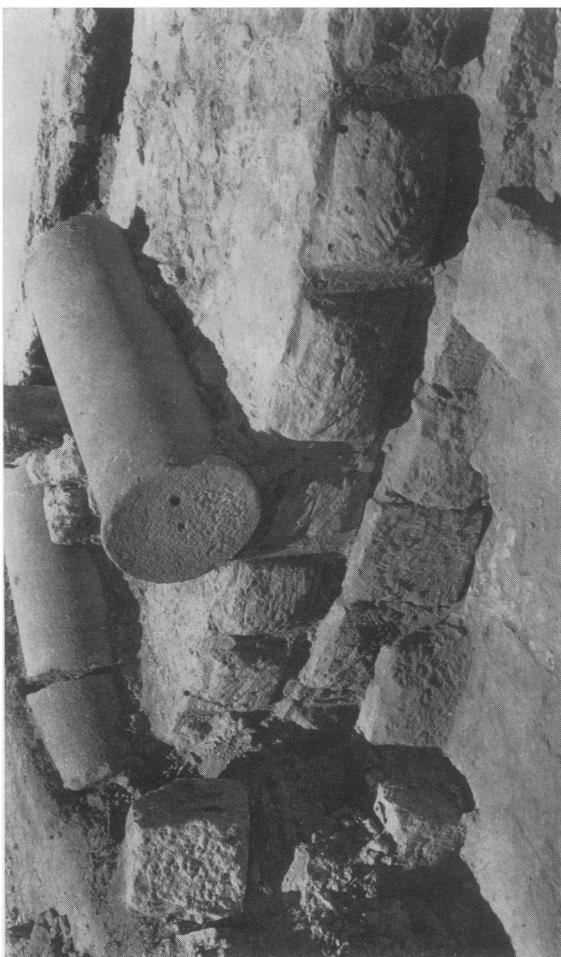
2. General View, looking Northwest
Excavations on a Castle Site at Paphos



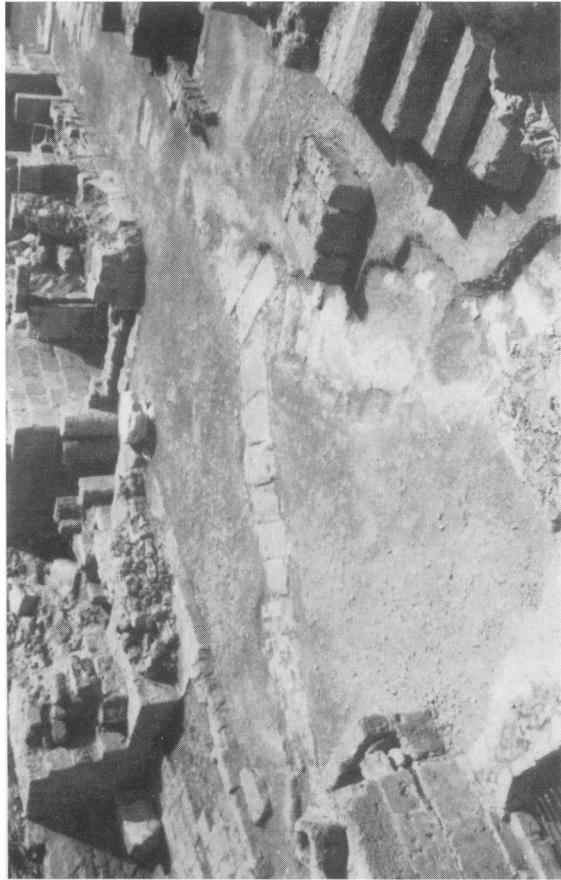
3. Inner Ward, looking Southwest



4. Paved Section of North Undercroft



5. Granite Columns in Position in Horseshoe Tower



6. Court, looking Northeast



7. West Arm of Outer Ward



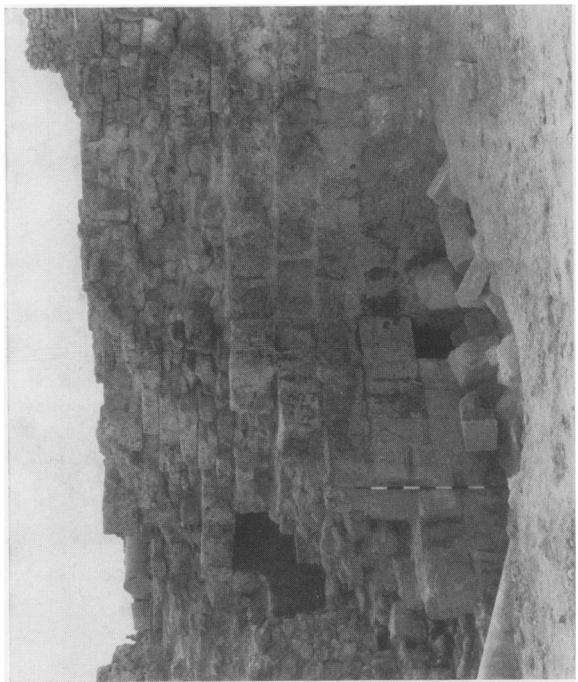
8. Rooms against Outer Wall North of Tower K, looking Northeast



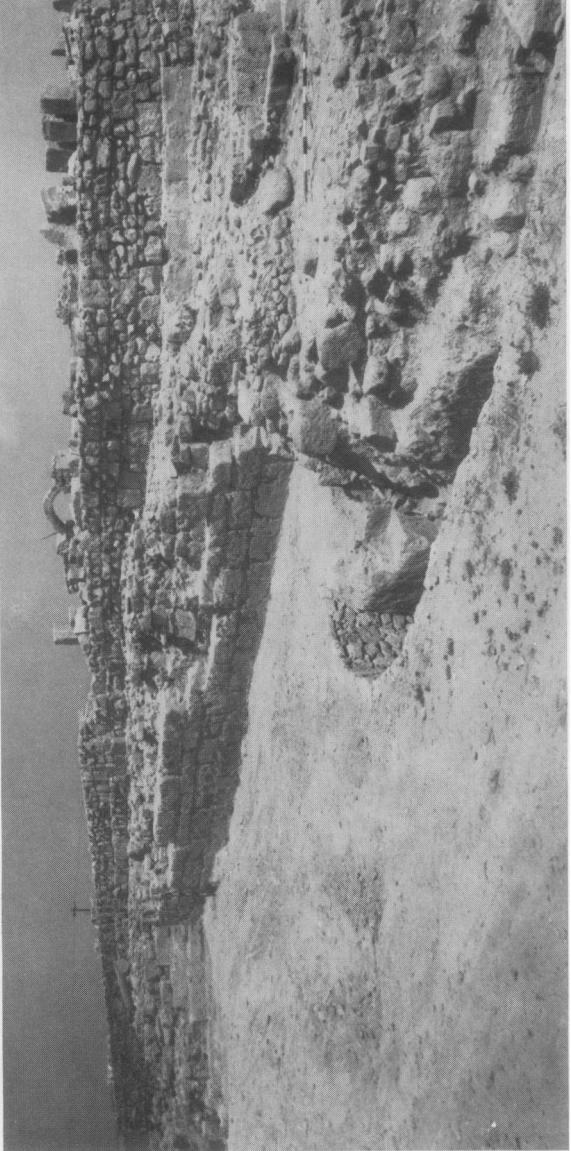
9. Foundations of Southwest Tower



10. Steps South of Entrance to Tower C, looking South



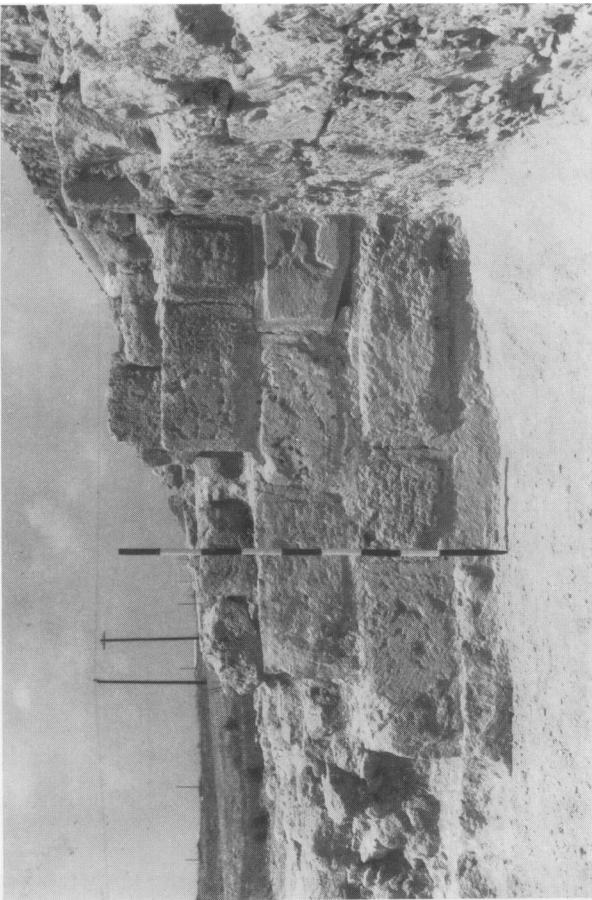
11. Sally Port in North Flank of Tower K,
looking Southwest



12. Ditch between Tower W (right) and Tower Z



13. Tower A, looking North



14. East Flank of Tower Z



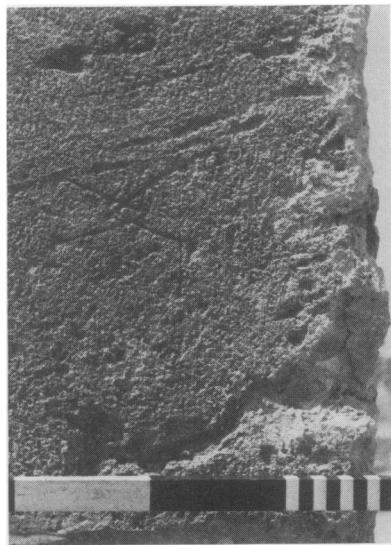
15. Threshold of Entrance to Tower C



16. Corbel (FC. 1035)
from Northwest Corner of Court



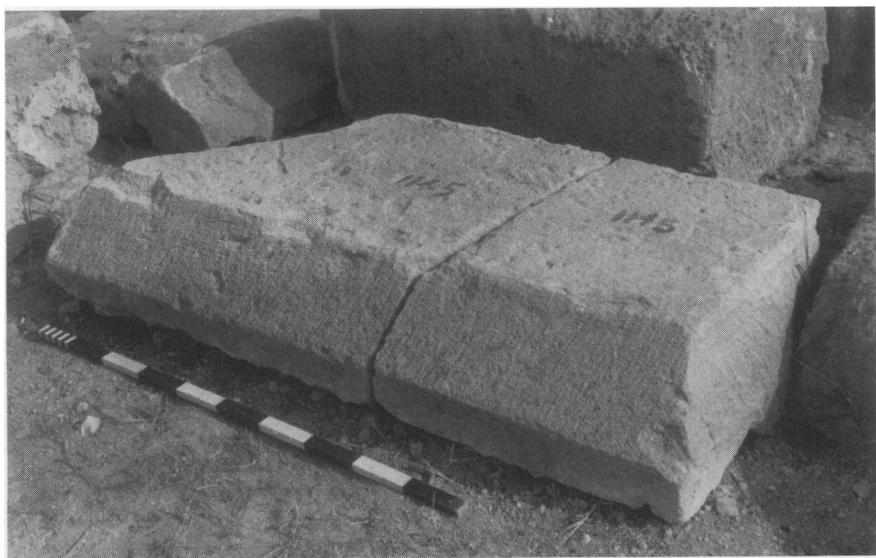
17. Capital (FC.89) from
Inner Gateway of Horseshoe Tower



18. Mason's Mark on
South Intermediate Pier



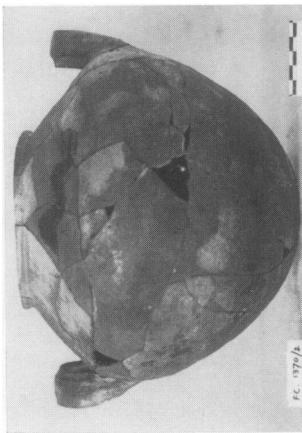
19. Mason's Mark on Bossed
Block from Southwest Tower



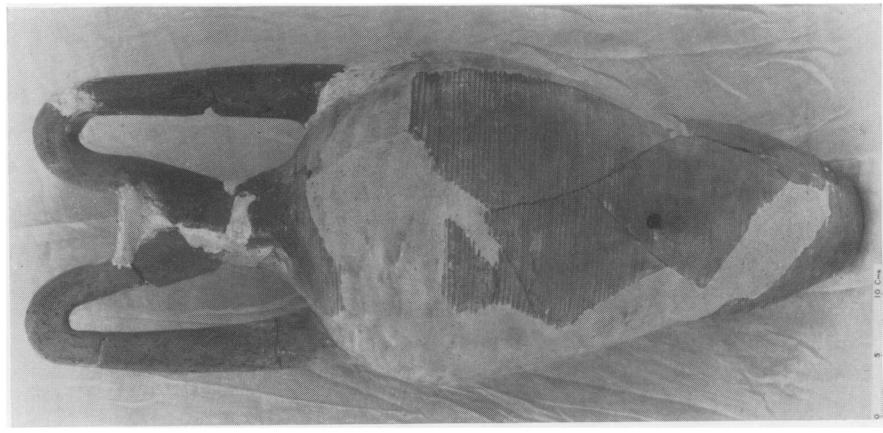
20. Cornice Block from Court



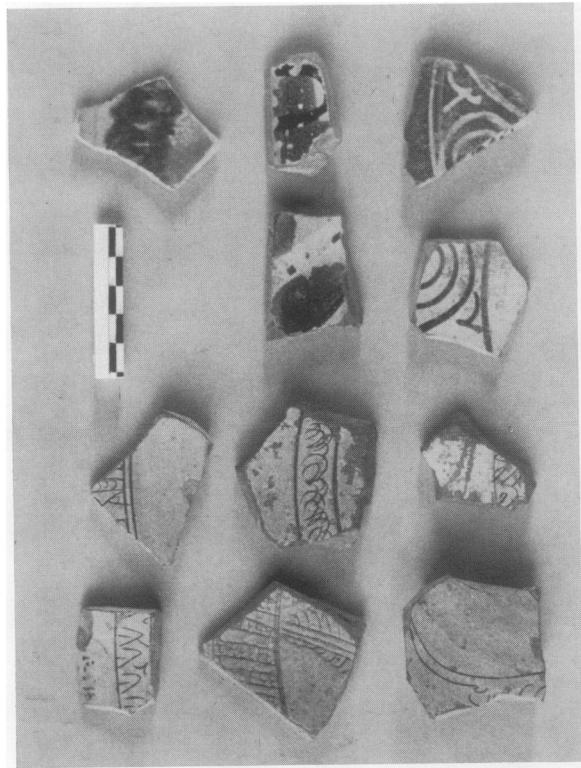
21. Beaked Corbel from Court



24. Cooking Pot Type A (FC.1370/2),
Early Thirteenth Century



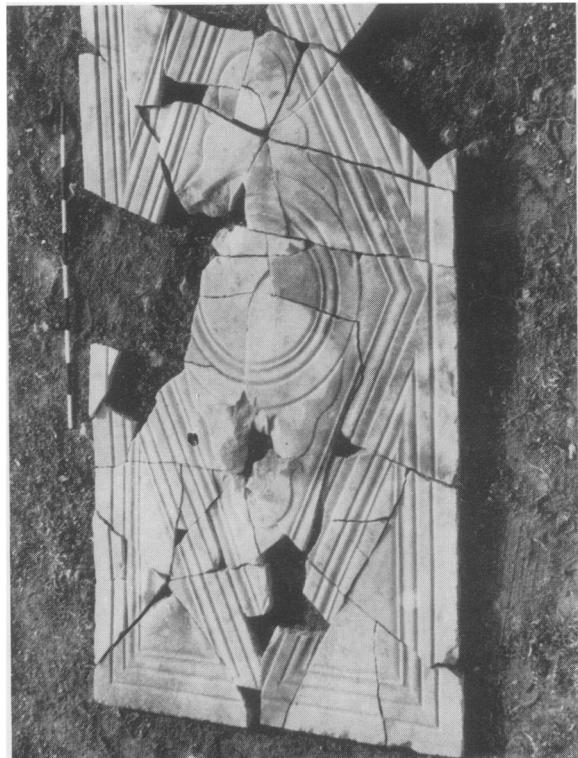
23. Amphora (FC.1012) from Staircase
West of Tower P, Early Thirteenth Century



22. Byzantine Pottery Fragments, Early Twelfth Century

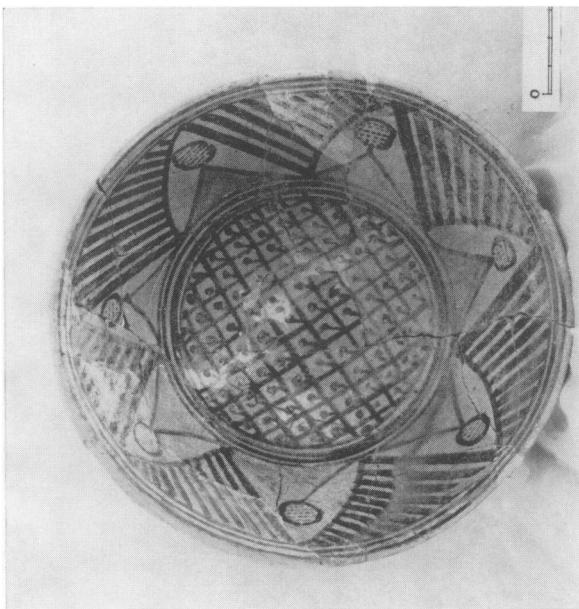


25. Amphora from the Glass Factory
(FC.244/1), Early Ninth Century

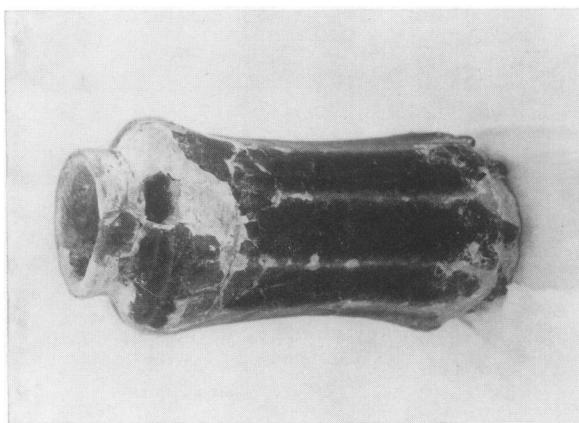


26. Marble Panel (FC.627) from Well, Seventh Century

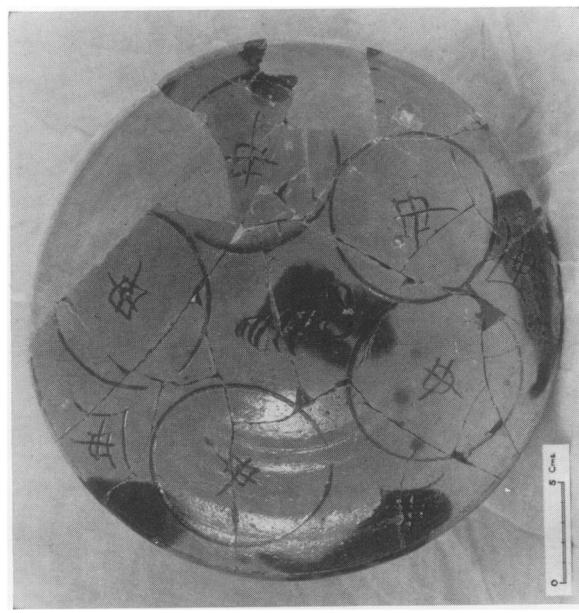
27. Amphora (FC.2182/31)
from Ditch by Tower W,
Early Thirteenth Century



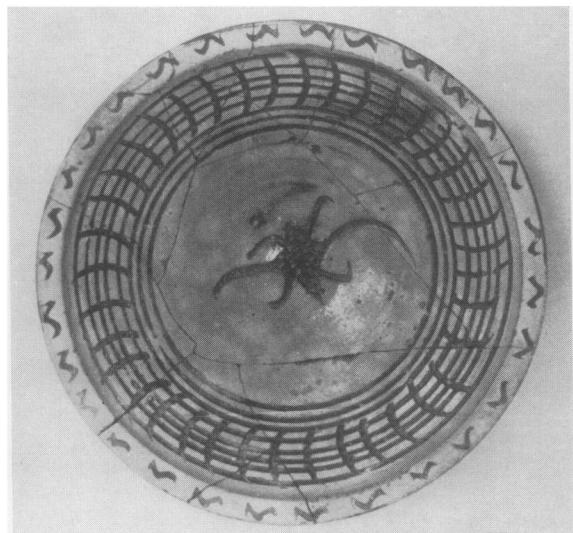
28. Incised Dish (FC.2511/1)
from Room against East Outer Wall



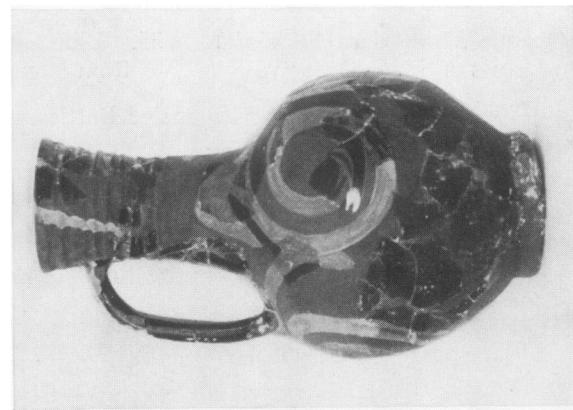
29. Syrian Albarello (FC. 2489)
from Room against West Outer Wall



30. Protomaiolica Bowl (FC.1282/1)
from Room against East Outer Wall



33. Incised Dish (FC.2133)
from Ditch by Tower W

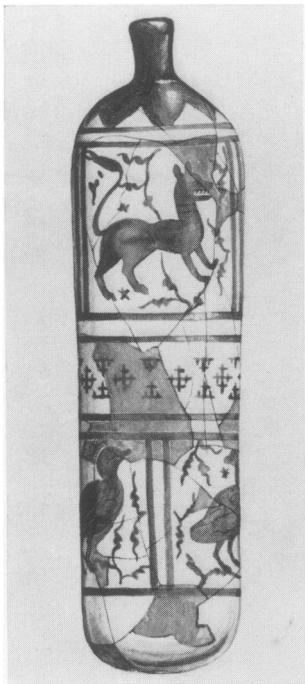


32. Slip-painted Jug (FC.1616/2)
from Well in Wall of Inner Ward

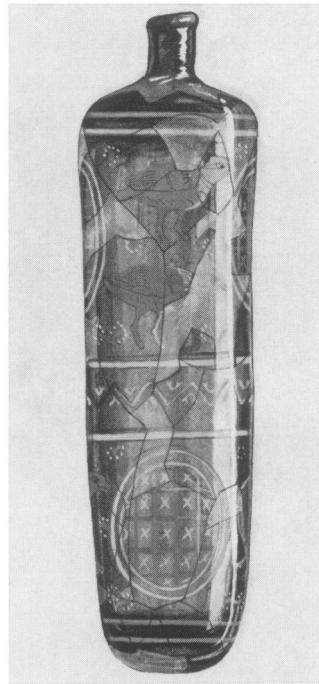


31. Incised Dish (FC.2502/1)
from Room against East Outer Wall

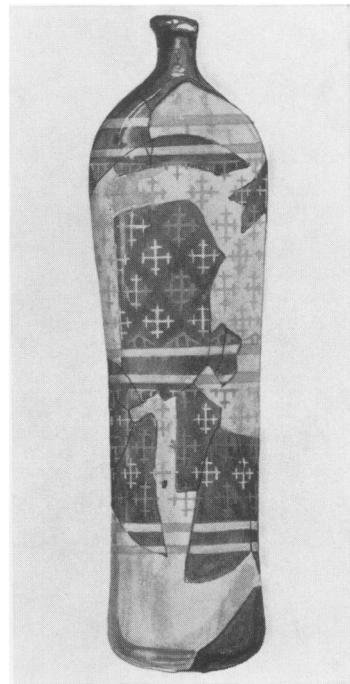
All Early Thirteenth Century



34. Opaque White Glass (FC.855/1)
from Debris of South Outer Wall



35. Blue Glass (FC.503/1)
from Mouth of Drain

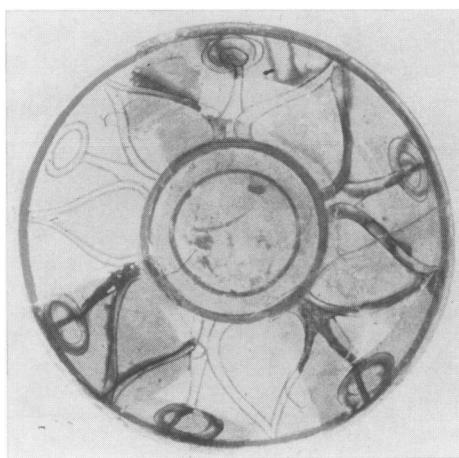


36. Purple Glass (FC.855/2)
from Debris of South Outer Wall

Gilt and Enameled Bottles, probably Late Twelfth Century



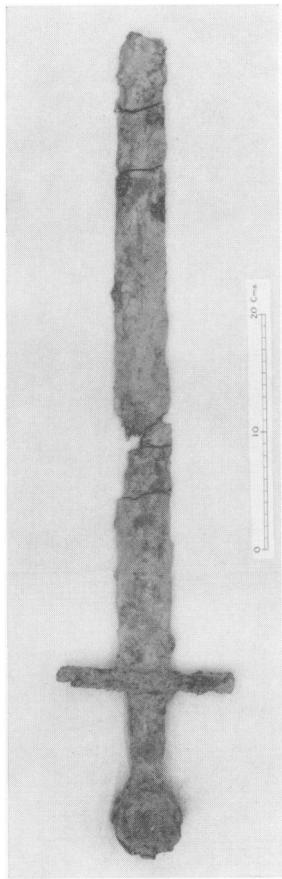
37. Incised Dish (FC.818/2)
from West Undercroft, Late Twelfth Century



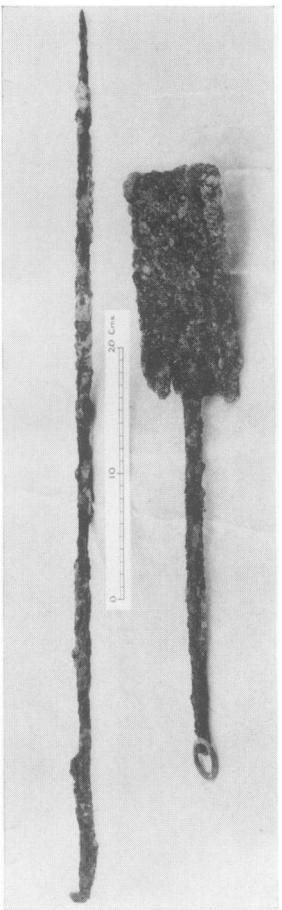
38. "Zeuxippus Ware" Bowl (FC.1315/2)
from West Ditch, *ca.* 1200



39. Gilt and Enameled Bottle of Blue Glass
(FC.481/1), Twelfth Century



40. Sword (FC.2486) from Room against West Outer Wall



41. Spit (FC.2460) and Shovel (FC.2459) from Rooms against West Outer Wall



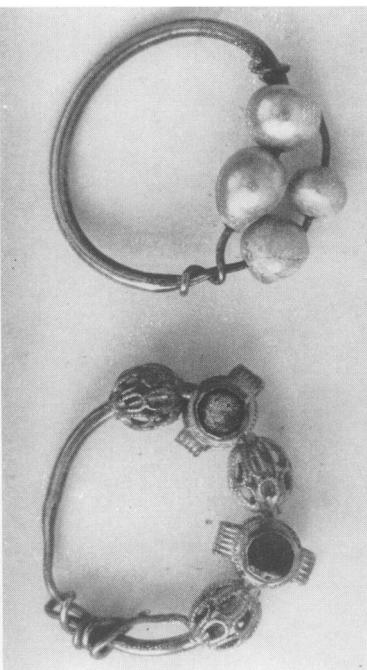
42. Helmet (FC.2218) from Ditch by Tower W



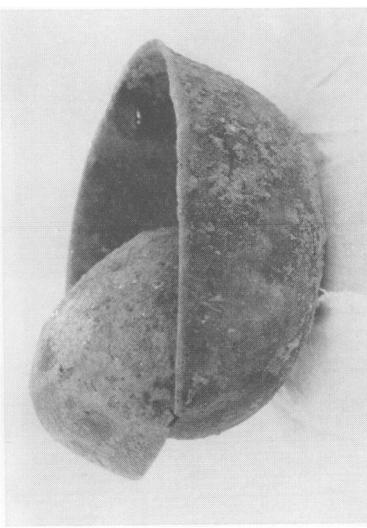
43. Lead Seal of Honorius III
(FC.659)



46. Bronze Jug with Handle (FC.2488)
from Room against West Wall



45. Gold Rings (FC.1718, 1734)
from Northwest Corner of Court
All Early Thirteenth Century



44. Bronze Bowls (FC.2487/1-2)
from Room against West Wall